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About the Journal

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Foreword

Welcome to the First Issue of 2020 for the Journal of Social Sciences and Humanities (JSSH)!

JSSH is an open-access journal for studies in Social Sciences and Humanities published by Universiti Putra Malaysia Press. It is independently owned and managed by the university for the benefit of the world-wide science community.

This issue contains 47 articles; a review article, two case studies and the rest are regular articles. The authors of these articles come from different countries namely Malaysia, Japan, Phillipines, Indonesia, Thailand, Iran, Morocco, and India.

A regular article entitled “Defining Employment Discrimination in Malaysian Legal Context” discussed on the employment discrimination from the legal perspective. This study shows that discrimination at work indubitably results in inequality, unfairness, and diversity in the labour market outcomes and from the legal perspective, employment discrimination is against the principle of equality. The detailed information of this article is presented on page 379.

A selected regular paper from the scope of anthropology, entitled “Breast Cancer Etiologies Among Young Malay Breast Cancer Patients” discussed various factors associated with the onset of breast cancer symptoms among young Malay women. It is evident from the present study that young Malay informants had attributed their breast cancer illness to supernatural causes and non-supernatural causes. Details of this study are available on page 547.

Edwin Tan Leng Phil summarized the selected works from Nolan and the elements in his films that exhibit duality in his article, entitled “The Grey Area in a Black and White World – Duality in Christopher Nolan’s Films”. He perceived that the way that the theme of duality was tackled in the numerous pieces of literature and films left a lot to be admired and opened to analysis and interpretation. Further details of the study can be found on page 589.

We anticipate that you will find the evidence presented in this issue to be intriguing, thought-provoking and useful in reaching new milestones in your own research. Please recommend the journal to your colleagues and students to make this endeavour meaningful.

All the papers published in this edition underwent Pertanika's stringent peer-review process involving a minimum of two reviewers comprising internal as well as external referees. This was to ensure that the quality of the papers justified the high ranking of the journal, which is renowned as a heavily-cited journal not only by authors and researchers in Malaysia but by those in other countries around the world as well.

We would also like to express our gratitude to all the contributors, namely the authors, reviewers, Editor-in-Chief and Editorial Board Members of JSSH, who have made this issue possible. JSSH is currently accepting manuscripts for upcoming issues based on original qualitative or quantitative research that opens new areas of inquiry and investigation.

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Review Article

A Systematic Literature Review of Narrative Analysis in Recent Translation Studies

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ABSTRACT

As early as the 1980s, the narrative has been redefined by sociologists and communication theorists as a way to constitute social identity; however, to date, it has not been specified how far narrative analysis has reached into translation studies because of the different understandings of the term. Therefore, it is essential for researchers to carry out a literature review of narrative analysis in this field in a more complete way. This study reviews the body of literature that uses narrative analysis in recent translation studies. The method used in this study is a systematic literature review, which involves pre-set criteria in selecting academic articles to be surveyed within a five-year period (1 January 2014 to 31 December 2018) and a qualitative synthesis of the findings. Through description and analysis of the titles, abstracts, keywords, and full papers (when necessary) of the selected 92 academic articles, based on a revised PRISMA flow, this study arrives at a holistic and systematic assessment of this approach over the past five years to guide future research in translation studies. The main findings reveal that narrative analysis has not yet become a mainstream

approach in translation studies. The focus of studies in this field should be shifted from empirical research in how narrative analysis is used as a tool towards theoretical reflection on what narratives are. What is more, new fields still await examination concerning research methods and subjects.

Keywords: Narrative analysis, PRISMA, systematic literature review, translation studies

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INTRODUCTION

Narrative was long recognised as a rhetoric mode of discourse like argumentation, exposition, and description until scholars such as Somers and Gibson, Baker, and Fisher took the sociology turn in narrative studies and pointed out that narratives exist everywhere and by essence not only constitute ‘our social identities’ (Somers & Gibson, 1993) but also shape people’s opinions. In this sense, any text, written or spoken, personal, public, or conceptual, can be viewed as a form of narrative. Narrative analysis, as a research methodology, is a family of approaches to diverse kinds of texts, which have in common a storied form (Kohler Riessman, 2005). This approach theoretically renders a fresh perspective in various areas of social science studies.

However, it has not yet been determined whether narrative analysis has been given due attention in translation studies because of the cross-subject nature of the discipline. The extent to which narrative analysis has reached current work in translation studies is also unclear. Questions such as ‘what is the status quo of narrative analysis in translation studies?’, ‘what are the trends in narrative analysis in this field?’ and ‘what are the gaps that require further research?’ arise, indicating that an overview is required of all studies in this area.

To answer these questions, a complete, rigorous, and comprehensive overview of the present studies cannot be extrapolated from a smaller group of samples or from sampling influenced by the researchers’ subjectivity. Traditionally, literature reviews

are conducted by selecting materials mostly based on the researcher’s subjectivity because the identification or analysis of landmark or classic literature relies heavily on the researcher’s own understanding. Therefore, in order to maintain objectivity in research, this study adopted a systematic literature review with pre-specified inclusion and exclusion criteria to fully evaluate research on narrative analysis in translation studies within the last five years (2014-2018) and analysed these studies to draw findings concerning the above three research questions.

Literature Review

Narratives as Translation. Regarded as a literary genre, the narrative has attracted people’s attention since as early as 1500 BC in the form of epics. The narrative style later expanded to drama, fiction, and even poetry, but the broader sense of the term ‘narrative’ changed when scholars agreed on a sociological turn in the narrative study. First brought forward in Aristotle’s *Poetics* with six main elements, the notion of the narrative was developed by philosophers like Mikhail Bakhtin who focused on the relationships between text and interpersonal communication, opening the door for narratives to join communication (White, 2015), and Foucault, who linked power with discourse (Sahni & Sinha 2016), paving the way for the evolution of narrative study in sociology.

According to sociologists and communication theorists such as Bruner, Fisher, Somers and Gibson, and Baker,

the terms ‘narrative’ and ‘story’ can be interchangeable. Narratives ‘are public and personal stories that we subscribe to and that guide our behaviour’ (Baker, 2006). Narratives are more than a mere mode of communication or a kind of rhetoric device. They construct reality and facilitate communication between people. In this sense, any text, written or unwritten, from personal diaries, government documents, advertisements, to film making, can be viewed as a kind of narrative.

There is no doubt that translation is also a form of narrative because translation is ‘a rewriting of an original text’ (Venuti, 2017). No matter whether the text in translation is literary or non-literary, it has all the features of narrative from the sociological perspective: it is a way of ‘story-telling’, it guides people’s construction of experiences, and communicates with readers (Stapleton & Wilson, 2017). However, the relationships between source texts and targeted texts and between original authors, translators, and target readers add more layers to the ‘story-telling’ process of narrative and make translation texts unique samples for narrative analysis.

With respect to the text types, in 1995 at a translation seminar held at the University of Warwick, Laura Salmon-Kovarsky proposed a model identifying three translation types in terms of the hierarchy of translatability, from the least difficult to be translated to the most difficult (as cited in Kuhlwezak, 2003). In this hierarchy, the easiest texts to be translated are highly specific texts, the literary texts are

in the middle, and the most difficult to be translated are hybrid texts. Highly specific texts are texts in conventional forms with a great proportion of ‘specialised lexical terms’ conveying important information. Academic articles, government documents, and the like are highly specific texts. Literary texts include both texts ‘written in literary languages’ and texts written in ‘the language of literature’. Fiction and poetry are literary texts, as are aphorisms, even though the latter are sentences containing less important information written in ‘the language of literature’. Hybrid texts are a mixture of both highly specific texts and literary texts. Travelogues are a case in point (Kuhlwezak, 2003).

Narrative Analysis. As the evolution of the definition of ‘narrative’, narrative analysis is a research frame that is constantly progressing; starting by presenting an analysis of literary works, it is now used to examine every part of the social world - from literature, religion, and history to public services. Accordingly, approaches in the narrative analysis have been shifting towards sociology. In 1969, Labov proposed the application of the structural analysis of narratives with a focus on story grammar (Labov, 1969). Later scholars like Plummer turned to sociological approaches and enlarged the scope of analysis from the story itself to the cultural, historical, and political contexts of the story (Plummer, 2002). Bruner took another step forward and explored the functions of narratives, that is, the ways in which narratives construct

reality and influence people's lives (Bruner, 1991). Narrative analysis has become increasingly popular since the 1990s, but there is no unified method for its application because of its 'interdisciplinary' nature (Fina & Georgakopoulou, 2015). Various tools for narrative analysis are borrowed from other fields as long as they are applicable for the analysis of 'texts' and their contexts as data or evaluation. For example, quantitative longitudinal study of narrative type interviews is employed in analysing the junior-to-senior transition (JST) in Swedish athletes (Franck & Stambulova, 2019); listening guide analytical from psychology is used for capturing the subconscious expressions in personal narratives (Harel-Shalev & Daphna-Tekoah, 2016).

The central methods through which narrative analysis is conducted can be grouped into two basic categories: research *on* narratives (examining what is said, including the meaning of the words or features of the text) and research *with* narratives (how narratives work to construct reality and to communicate). The latter is 'built on, and follow[ing] the insights gained from' the former (Bamberg & Cooper, 2012). Specifically, in translation studies, the two basic categories refer to studies of narrative features in translated texts and narratives as strategies in the process of translation, both of which inform each other and work with together to reach an interpretive conclusion. In other words, studying the features of narratives in translation can help improve or analyse the ways in which these narratives are used in real social communication.

Systematic Literature Review. Systematic literature reviews were first and primarily implemented in healthcare interventions (Eden et al., 2011). The method aims to provide a comprehensive overview of current literature relevant to particular research questions, as well as a presentation and synthesis of the findings. It is distinguished from traditional literature reviews by being 'objective, systematic, transparent, and replicable' (Siddaway, n.d.). Its origin dates to the end of the 20th century when Cochrane (1999) and Mulrow (1987) provided detailed guidelines for carrying out systematic literature reviews in medical studies (as cited in Durach & Wieland, 2017). In recent years, it has been applied in fields such as social work or business management in addition to medical or biological studies (Sahni & Sinha, 2016). However, because of the 'idiosyncrasies' of each field, 'the retrieval, selection, and synthesis of relevant literature' (Durach & Wieland, 2017) in the present process of systematic literature review designed for medical and biological studies need to be adjusted to fit new fields.

To conduct a systematic literature review, four steps should be taken. First, clear and specific research questions must be proposed. Second, the databases must be clearly defined under the guidance of well-structured questions and the inclusion and exclusion criteria must be pre-specified concerning research questions, definition or conceptualisation, measures/key variables, research design, participants, time frame, and data (for meta-analysis) (Siddaway,

n.d.). Third, a thorough search for relevant research must be performed with minimal bias. Last but not least, all samples must be checked according to the pre-determined criteria for findings relating back to the research questions (Eden et al., 2011). Preferred Reporting Items for Systematic Reviews and Meta-Analyses [PRISMA] (2015) and Cochrane are two commonly used systems that offer standardised methods for systematic literature reviews. In order to maintain minimal bias, samples are taken from a major database as well as one or more supplementary databases. The screening of these samples should be done by at least two abstractors to avoid subjectivity in reviewing. In this study, the PRISMA workflow has been followed to carry out the review.

PRISMA originated from the QUOR (Quality of Reporting of Meta-analysis) Statement, a guideline used for systematic literature reviews of healthcare interventions in 1999. It includes a flow chart delineating different phases of systematic literature review: identification, screening, eligibility, and qualitative or quantitative syntheses (Liberati et al., 2009). Quantitative syntheses were excluded in the review because quantitative synthesis is based on meta-analyses, which are more suitable for identifying common effects or reasons for variations ‘when the treatment effect (or effect size) is consistent from one study to the next’ or ‘varies’ from one study to the next (Biostat. Inc, n.d.). For example, a meta-analysis could be used to test the effects of new drugs in a pharmacy to

check whether a single case is consistent with others. As the narrative analysis in translation studies is examined with no effect involved, the focus of the review is on the descriptions of studies. In this case, meta-analyses of quantitative measurement are not appropriate here, and a qualitative synthesis as the last phase of the flow is preferable.

METHODS

In this study, a systematic literature review was carried out on the trends (in the last five years), the status quo, and the gap of narrative analysis in recent translation studies. Research types, subjects, objectives, and methods of each study were reviewed according to the pre-set inclusion and exclusion criteria, by screening their titles, abstracts, and keywords in the first round and then the full papers if the components were not stated clearly.

Databases

In view of the availability and coverage of the bibliographic databases, two databases were selected from which to retrieve eligible literature for this study which were Proquest Central served as the primary database, while Scopus was used as a supplementary database. Proquest Central is ‘the largest, multidisciplinary, full-text database available in the market today’ (‘LibGuides: ProQuest Central: About’, n.d.) covering ‘all major subject areas, including business, health and medical, social sciences, arts and humanities, education, science and technology, and

religion' ('Products - ProQuest Central™', n.d.), which is congruent with the scope of translation studies as a transdisciplinary subject. Furthermore, more full texts can be retrieved in Proquest Central than other databases. It is essential for this review because full papers will be screened if titles, abstracts, and keywords fail to provide the components required in the first round of screening. Scopus 'is the largest abstract and citation database of peer-reviewed literature' ('What is Scopus Preview? - Scopus: Access and use Support Center', n.d.), which may guarantee us a more thorough search of peer-reviewed literature. The keywords used for locating articles in Proquest and Scopus were 'translation' and 'narrative'.

Google Scholar and Web of Science are two popular databases which were not included in this review. According to rigorous literature research, Google Scholar lacks 'advanced search features', which renders difficulty in launching a screening process of abstracts, titles and keywords in a systematic literature review. It is difficult to replicate Google Scholar's searches as well because of 'lack of stability over time' (Bates et al., 2017). Web of Science (hereafter WoS) was excluded in this review in that 'Scopus includes most of the journals indexed in WoS' except journals in Natural Sciences and Engineering (Mongeon & Paul-Hus, 2016). Therefore, Scopus has been chosen over WoS to avoid redundancies.

However, Scopus has a limitation in its coverage. There is 'an overrepresentation of certain countries and languages to the detriment of others' in this database

(Mongeon & Paul-Hus, 2016). A study shows that English-language journals from countries such as the Netherlands, the United Kingdom, and the United States are overrepresented in Scopus. What is more, English is 'the only language that is constantly and strongly overrepresented' (Mongeon & Paul-Hus, 2016) in Scopus. Similar biases exist in other popular databases like WoS as well.

Inclusion and Exclusion Criteria

Before launching the review, the inclusion and exclusion criteria have been specified according to the research questions, research design, definition, measures/key variables, participants and time frame. The inclusion criteria are:

1. The publication must be a publicised scholarly article, conference paper, or conference proceeding.
2. The publication must contain 'narrative' and 'translation' in its title, abstract, and keywords.
3. The publication date must be within the range from January 1, 2014, to December 31, 2018.

The exclusion criteria are:

1. Publication on subjects of public health, patients, and healthcare, because 'translation' in these subjects means different things like biology conversion or transfer ('Translation | definition of translation by Medical dictionary', n.d.).
2. Publication with words like 'translation' and 'narrative' in the

abstract but that does not include the two as its research objectives or research methodology, or publication in which the two words are used irrelevantly.

PRISMA Workflow

Figure 1 below is the revised workflow diagram of PRISMA that depicts the flow of information through the different phases of this systematic review. The review involves four phases: identification, screening, assessing of eligibility, and finally what is included.

It is important to note that even though the search was initially launched based on titles, abstracts, and keywords, some articles

lacked sufficient data in these sections, so it was difficult to decide whether to exclude them or not. In such cases, the reviewers turned to the full papers to assess their eligibility for inclusion. Each step taken in this review can be seen in the flow chart in Figure 1, which provides a detailed map of the number of records identified, included, and excluded, and the reasons for exclusions. The identification and screening phase were conducted by two independent abstractors for a less-biased collection of literature.

As can be seen in Figure 1, 220 samples from Proquest and 205 from Scopus have been retrieved in the phase of identification. The total number was reduced to 295 after

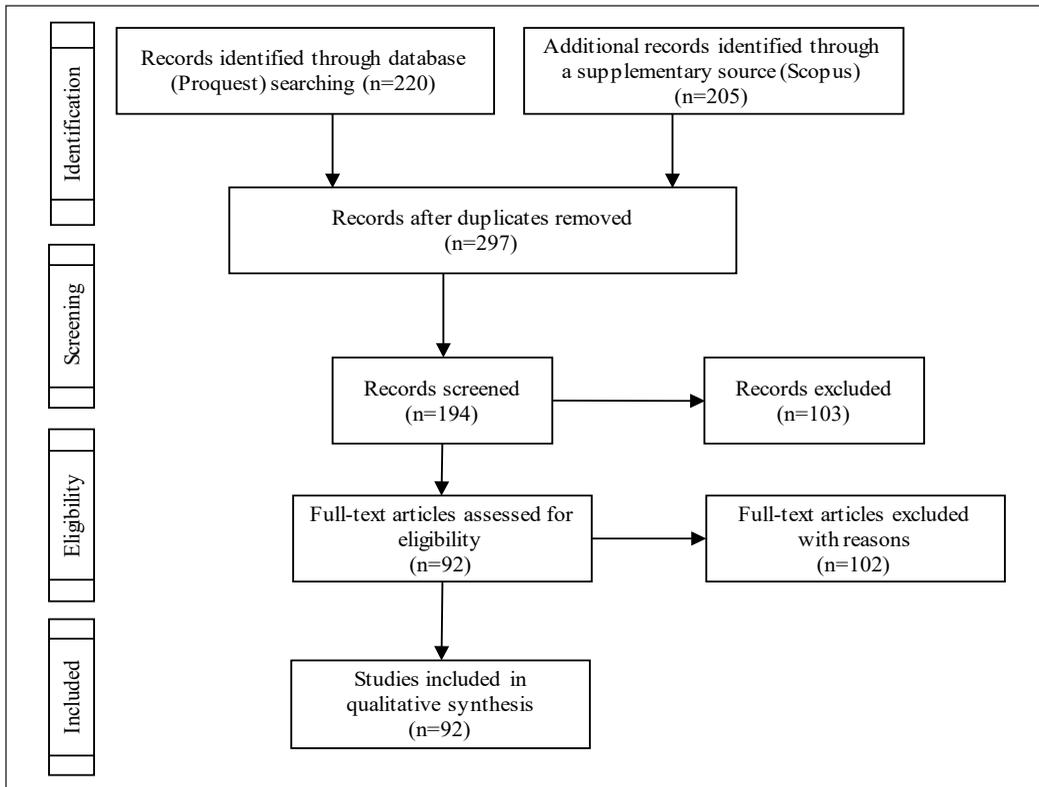


Figure 1. PRISMA flow chart for systematic literature review

duplicates have been removed. However, with regard to the exclusion criteria that had been set previously, 103 papers on public health, patients, and healthcare were removed because in these fields, ‘translation’ is a medical term, which does not fit into the inclusion criteria. The number of remaining papers with both ‘translation’ and ‘narrative’ in their title, abstracts, or keywords was 194. However, this did not ensure that all of these papers would be useful for this review because the two words may not have been related to each other in these studies or they may not have been a part of the research objectives or methods. They may have been just individual words that happened to be included in the paper or referred to as a part of the research background. The next step was to assess the full articles of the 194 papers to determine their eligibility. Those articles without narrative analysis as methodology and translation or texts in translation as research objectives are excluded. After the four phases of identification, screening, and

eligibility-assessing, 92 samples were left for a qualitative synthesis of this study.

RESULTS

After collecting enough samples, data were reviewed and arranged according to different components of the studies: research types, research subjects, research objectives, and research methods. Inductive methods are adopted in analysing the results because no hypothesis or speculation had been set before the literature review. The results are based upon observations.

Figure 2 presents the yearly trend in the distribution of research types of these studies. Two findings can be identified here. First, narrative analysis in translation studies has not always been on the rise during the past five years. It is fluctuating over the years. In 2014, there are 13 papers that adopted narrative analysis. In 2015 and 2016, the numbers are 18 and 24. However, in 2017, it suffered a setback in quantity; only 16 papers of the two databases are

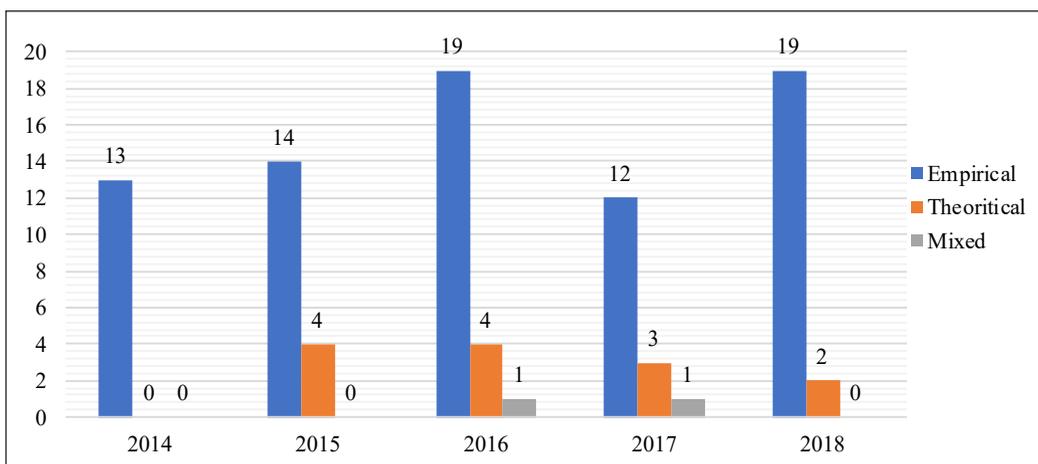


Figure 2. Yearly distribution of research types (2014-2018)

found, less than the previous two years. In 2018, the number rose again to 21. The second finding shows that papers covering empirical studies outnumber those covering theoretical studies in this area every year.

The narrative exists everywhere around us. The samples collected to cover a wide range of subjects in almost every part of our lives - literature, history, religion, media, art, politics, business, and entertainment. The samples were categorised in accordance with Laura Salmon-Kovarsky's model of translation types (as cited in Kuhiwczak, 2003) into three groups, from the easiest to be translated to the most difficult ones which are highly specific texts, literary texts, and hybrid texts.

A clearer and more general understanding of the trends of subjects is shown in Figure 3 below, researchers' interest in narratives in literary translation studies has maintained a stable position through the years, higher than the other two types, and highly specific texts are drawing more and more attention, with a year-on-year increase in number.

There are some studies of hybrid texts every year, but they are not numerous. Researchers do not choose the subjects of their studies according to the translatability of the texts. They favour neither the most difficult ones to translate nor the least difficult ones. It is clear, however, that small attempts are being made to explore new types of texts to study.

The next aspect to be examined is the distribution of research objectives over the five years. As mentioned before, narrative analysis is the intersection of two basic objectives research on narrative in which narrative itself is the object of the study, and research with narrative in which narrative is used as a tool (Bamberg & Cooper, 2012). In short, one concerns the features of narratives and the other concerns the strategies of narratives.

In Figure 4, the research objectives of these samples are listed in columns. Most studies within the last five years focus on narrative strategies, and few are taking the epistemological approach to explore what narrative is. However, some efforts are being

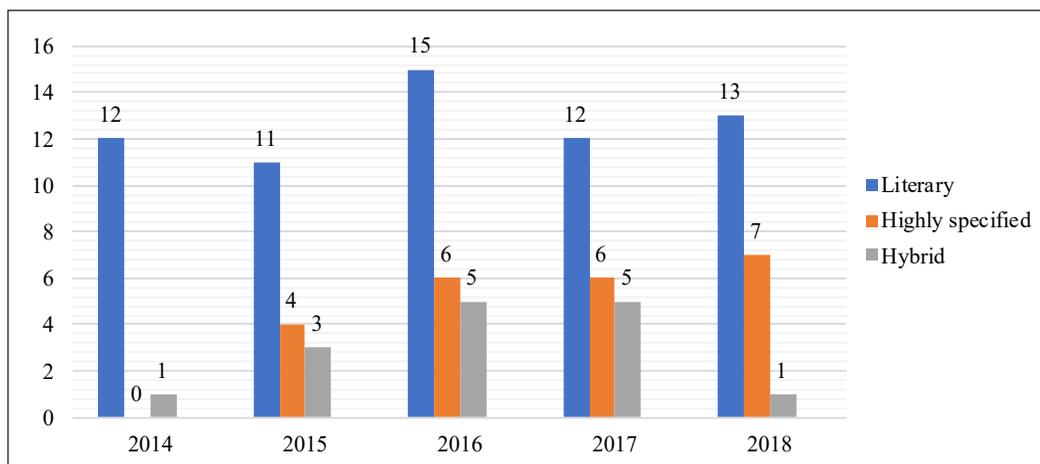


Figure 3. Distribution of research subjects yearly (2014-2018)

made to explore new perspectives such as studies of translation reception (Scaff, 2014) and quality assessment (Hassan, 2015).

Narrative analysis is an interdisciplinary field with no unified methods. It borrows tools from other sources. In these samples, diverse research methods are employed, as is shown in Figure 5, setting examples for other researchers to plan future studies by importing tools from fields such as

computer science, linguistics, or rhetoric. Besides textual analysis, the methods found in the articles over the last five years include discourse analysis (Schuster, 2014), critical discourse analysis (Constantinou, 2017), comparative approach (Wilkinson, 2015), computer-generated language analysis (Prud'Hommeaux & Roark, 2015), fieldwork and rhetorical analysis (Dodge & Keränen, 2018), interview analysis

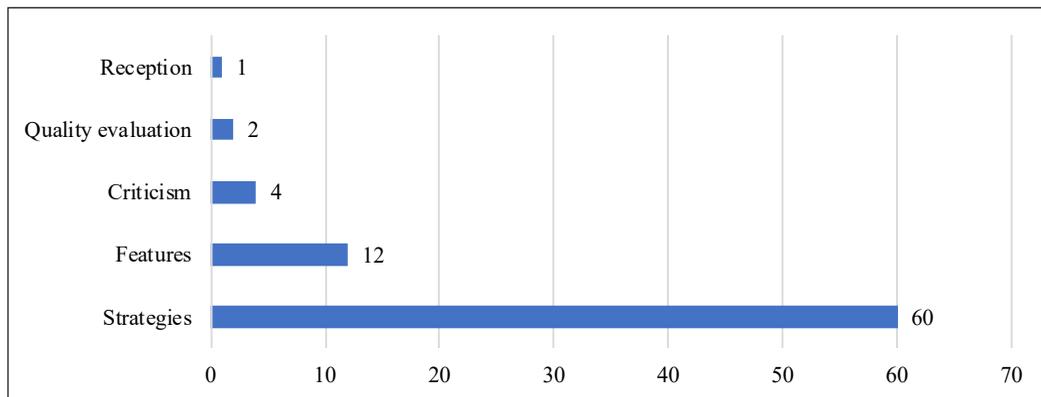


Figure 4. Distribution of research objectives within five years (2014-2018)

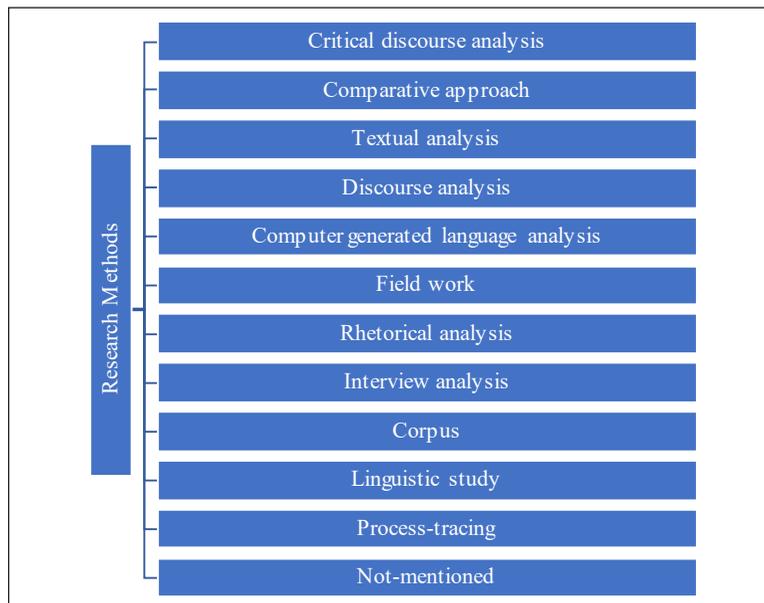


Figure 5. Categories of research methods in narrative analysis in translation studies (2014-2018)

(Johnson, 2016), corpus (Rizzo, 2018), linguistic study (Gunderson, 2016), and process-tracing (Bolton & Minor, 2016).

However, in 30 out of the 92 samples, the researchers do not mention the method through which they conduct narrative analysis. Fuzzy words such as ‘explore’, ‘analyse’, ‘examine’, and ‘inquire’ are found, instead of practical research methods.

DISCUSSIONS

Trends of Narrative Analysis in Translation Studies

Although narrative theoretically exists everywhere and narrative analysis is applicable to many different kinds of texts, written or unwritten, this systematic literature review indicates that compared with large numbers of academic articles including journal papers, conference papers, and proceedings on other approaches in translation studies within the last five years, narrative analysis has not become the mainstream approach in translation studies. Narrative analysis has even suffered setbacks in its progress in quantity. Another problem revealed in this systematic literature review is that as the years pass, there is no trend showing that researchers could reflect and reconsider the fundamental rules in narrative because the number of empirical studies always far surpasses that of theoretical studies.

In spite of that, the quality of narrative analysis has improved. Researchers do not limit their scope within literary translation; they are turning their attention towards

more diversified areas, making tentative attempts to combine narrative analysis with practice in translation, which has enriched this approach.

The Status Quo of Narrative Analysis in Translation Studies

The systematic literature review identified two general characteristics of current implementations of narrative analysis in translation studies. First, because of different understandings of narrative and the diverse frameworks of narrative analysis, researchers attach more importance to research with narrative analysis as a tool without solving the epistemological problem of the term ‘narrative’. In particular, the studies examining the ‘what’ in narratives have lagged far behind those concerning the ‘how’.

Second, as a positive result of the additional attention given to empirical studies and analysing strategies in narratives, some researchers borrow tools from other approaches or subjects and create more diversified research methods. In addition, research subjects are moving from a single modality to multimodality.

Gaps in Recent Research and Research Implications

In the following section, gaps in recent research of narrative analysis in translation studies are elaborated and solutions for such gaps based upon narrative theory are proposed. Specifically, the gaps between theory and practice and the gaps in research methods and subjects are illustrated.

Gaps between ‘What’ and ‘How’. As is mentioned earlier, narrative analysis is placed at the intersection of both researches on narratives and research with narratives. The results of this systematic literature review show that more attention has been drawn towards narrative analysis used as a tool instead of reflecting upon what narratives really are. If researchers are carrying out studies on narrative analysis in translation without fully understanding the epistemology of the term ‘narrative’, their empirical studies may risk losing their cornerstone.

Proposition: The gap between what narratives are and how to carry out narrative analysis is not new. The ever-changing definitions of narratives provided by different scholars in fields like communication, literature, and sociology have confused researchers when they attempt to find related literature to support their research on narratives in different fields. It is recommended that researchers understand the features of their research samples before jumping into discussing the strategies that these samples employ. For example, the definition of narrative in the literature presented by scholars like Wayne C. Booth emphasising the rhetorical features of narrative can be used effectively (Booth, 2010) to examine narrative in literary translation from the perspective of rhetoric.

Gaps in Research Methods. Researchers’ gaps in their understanding and application of research methods in the narrative analysis are shown in the literature review. Some

researchers engaged in highly academic attempts by combining narrative analysis with tools from other fields, or by exploring new methods, while others stated unclear methods in their research.

Proposition: Narrative analysis is an umbrella term, and translation study is an interdisciplinary subject. This combination engenders diversities as well as challenges. Besides textual analysis, there are more possibilities for researchers to explore in methodology such as fieldwork, discourse analysis and so on. To this end, a collection of research methods have been organised in Table 1 with the aim of offering assistance to researchers looking for appropriate methods in this field.

Gaps in Research Subjects. Another noticeable gap lies in the uneven distribution of the subjects of these studies. Even though narratives are recognised as existing everywhere around us, current research primarily concerns narratives in translations of literary texts. Studies on the translation of highly specific texts or hybrid texts in more diversified forms through narrative analysis are less. No matter what the reason is, translation studies with narrative analysis could hardly meet the demands of translation markets.

Proposition: The development in translation practices requires researchers to leave the ivory tower and enlarge their scope, as translation is a huge industry. For example, translation in corporate communication has long been ignored, yet it is in huge demand for high-quality services under the guidance

of a mature theoretical translation system. While studies on translations of corporate communications from narrative approach may sound novel, nowadays, texts in the translation of corporate communications are in variable forms, highly specific or hybrid, with important information to convey, which renders good samples for study. Based on the findings in this review of previous studies on narrative analysis of translation in fields other than literature such as public services (McBeth & Lybecker, 2018), popular culture (Zur, 2018), and children's spoken language (Prud'Hommeaux & Roark, 2015), exploring new fields in translation studies does not involve starting from scratch.

CONCLUSION

This paper launched a systematic literature review of current research in narrative analysis in translation studies in the last five years (from 1st of January 2014 to 31st of December 2018). While previous systematic literature reviews have mostly been carried out in the healthcare field with quantitative synthesis, considering the peculiarity of translation studies, a descriptive qualitative synthesis has been provided without a meta-analysis. The aim of this study is to provide a holistic systematic review over the last five years of all the related research on narrative analysis in translation studies with minimal bias, including the trends, status quo, and gaps. This study also contributes to the present application of systematic literature reviews by offering a case in translation studies.

The findings of the review indicate that narrative analysis in translation studies is far from being a mature and mainstream approach. The focus should be shifted from studies of how narrative analysis is used as a tool towards the reflection upon what narratives are, and new fields still await examination.

However, since a systematic literature review can only maintain minimal bias, this research is of no exception. It has some limitations. First, the study detected setbacks in the quantities of narrative analysis in translation studies through a statistical analysis but failed to explain why, because individual systematic literature reviews are more suited to discovering problems than finding ways to solve them. Second, a review of papers published within the last five years is not sufficient for identifying the evolution of narrative analysis in translation studies because the term 'narrative' has been used over a much longer period of time. To gain a full view of the development of the term, reviews should employ a wider time range. The third limitation lies in that due to 'the strong English-language overrepresentation' of the databases (Mongeon & Paul-Hus, 2016), a rigorous and comprehensive review of papers published in English has been conducted whereas papers published in other languages are not included. For example, this review did not include papers written in Chinese from the most popular database in China named CNKI (China National Knowledge Infrastructure), which is 'the most comprehensive gateway of knowledge of China' ('Introduction', n.d.) because

more than 600 papers were identified after a preliminary search had been launched. It is certain that if CNKI is included as an additional supplementary database, the results will be richer, yet the review will be too broad for one journal paper. In this case, further researches could be conducted about differences in the narrative approach of translation studies between China and other countries.

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Slangs on Social Media: Variations among Malay Language Users on Twitter

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ABSTRACT

Twitter, a social media application and a popular microblogging platform, has become a compelling subject in linguistics. The nature of the communication on Twitter is informal, colloquial, and non-standard; and it is likely to contain slangs which is the interest of the modest research embodied in this paper. This study explored the variations of slangs employed by Malay language users through tweets that contained the Malay language keyword 'makan' (eat). Primary Qualitative Content Analysis was the research tool employed in this study. Slangs were categorized using an adapted scheme. The analysis found that Malay language users on Twitter implemented a variety of slangs in their online communication, such as shortenings, onomatopoeic spellings, phonetics replacements, inanities, leetspeak, cacography, and emoji. The findings of this study can be useful for developing a lexical database for Malay language slangs.

Keywords: Internet language, language variations, slangs, social media, Twitter

INTRODUCTION

The internet has brought huge impacts on our life, especially our communication. Through the internet, social media emerged and are widely used by millions of people worldwide (Cheung et al., 2011; Heer &

Boyd, 2005). This computer-mediated-communication has driven significant changes to the nature of written language. This was emphasized by Gee and Hayes (2011) who argued that digital media was an interesting hybrid of the properties of oral and written language. Social media is seen as an informal platform of communication with extensive use of slang (Crystal, 2011, 2008, 2006).

A slang referred to as the city's language (Green, 2015), is a type of language consisting of words and phrases that are

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very informal, more common in speech than writing, and are typically restricted to a particular context or group of people (New Oxford American Dictionary as cited in Adams, 2012). Slang is also used as a synonym for the terms cant, flash, or argot in reference to the 'language of rogues and thieves' (Zoltan, 2009). However, contrary to the traditional definition of slangs, internet slangs are mostly used in writing (Crystal, 2010). Other terms associated with internet slangs are netspeak, chatspeak, cyber-slangs, internet-jargon, cyber-jargon, and social-slang (Barseghyan, 2013; Teodorescu & Saharia, 2015). In this study, the expression 'internet slang' is used to indicate all these terminologies.

The topic of slang is an under-discussed and not adequately addressed; there is poor documentation of slang in the Malay language (Coleman, 2012; Green, 2015; Hoogervorst, 2015). A considerable amount of literature has been published on internet slangs used among members of the community of English language users by analyzing their chatroom conversations (Ecker, 2013; Merchant, 2001), gaming forums (Kelley, 2012; Kalima, 2008), or Facebook status (Mosquera & Moreda, 2012). However, researchers have not evaluated Malay language internet slang in much detail.

Recent studies on the subject of slang in Malaysia have particularly focused on teenage or youth slangs (Namvar, 2014; Namvar & Ibrahim, 2014; Rusli et al., 2018; Shamsudin, 2006). According to Malaysian Communications and Multimedia

Commissions [MCMC] (2017), the highest broad age group of internet users in Malaysia is 20-34 years old, and the second-highest broad age group is 35-49 years old. In contrast with previous research subjects, these age groups are not specifically teenagers. Therefore, this gap reveals that there is a need for further investigation of the use of slangs among internet users in Malaysia.

Research Objective

Set in the context of an electronic medium of social media, the main purpose of this research is to analyze the variations of internet slangs used by Malaysian Malay language users on Twitter. 'Variations' of conversation can be divided into formal and informal categories (Wolfram & Schilling, 2015), and slangs fall into the informal category (Harared, 2018; Kenwood, 1969; Zhou & Fan, 2013). Variations in the informal context usually occur in non-standard languages, which also may consist of formal words being used in informal situations, and it may occur in a single word, a group of words, or a sentence (Wolfram & Schilling, 2015; Zhou & Fan, 2013). In the words of Crystal (2006), "to study language change is to study people change; and change means variations". Data on language variations are useful for linguists to address social and educational concerns (Wolfram & Schilling, 2015). In the present study, 'variations' refer to the extended categories of the different forms of slang used on Twitter.

Literature Review

Slangs, Internet Slangs, and Twitter.

During its early days of documentation, slang was regarded as “low, vulgar, and unmeaning” (<http://webstersdictionary1828.com>). However, Reves (1926) argued that slangs could never be unmeaning, as they always had arbitrary meaning. Halliday (1976) continued to define slang as ‘antilanguage’, the secretive codes of transgressive or deviant subcultures. Today, scholars have acknowledged the functions of slangs such as its role towards social and psychological development (Moore, 2004), and its function in the construction of identity through language (Monaghan et al., 2012).

Slangs are words and phrases that are used in informal situations; it is something that nearly everyone uses and recognizes, but nobody can define precisely; compared to ordinary language, slangs are metaphorical, playful, elliptical, vivid, and shorter-lived (Asmah, 2008; Fromkin et al., 2017). Although various definitions of slang have been proposed by previous scholars, Nunnally (2001) stated that these definitions were circular and imprecise, and there was no widely accepted model of slang.

Internet slangs, in particular, are words or phrases that are regularly used in online conversations. Throughout this study, the term internet slang is used in reference to a variation of orthography on the internet, as well as the use of lexicon or linguistic habits situated outside the domain of standardized Malay. As it is considered as an informal

platform of communications, Twitter is a reliable source to gain insights in regard to slangs.

Twitter (<http://www.twitter.com>) is a real-time information exchange network that offers microblogging services (Lomicka & Lord, 2012). It is also an online news and social networking site where people communicate in short messages called tweets up to 280 characters. Twitter offers the opportunity to gather large amounts of informal language from many individuals (Nguyen et al., 2013). Social media has also prompted a subtler revolution in the way we communicate. We share more personal information, but also communicate with a larger audience. Our communication styles consequently become more informal and more open, and this seeps into other areas of life and culture (Reed, 2014). Malay is among the top five most used languages on Twitter (SemioCast, 2011), making it a relevant platform for an exploration of the use of internet slang in the Malay language.

Internet slang is believed to be originated back in 1975 when Raphael Finkel at Stanford compiled a Jargon File of hacker slang from technical cultures, and words such as ‘flame’ and ‘loser’ were recorded (Raymond & Steele, 1996). More slang words emerged ever since, and a long register of internet slangs was made, mainly focusing on the online chat slangs used by teenagers in America (Jones, 2006) and slangs used by groups of gamers (Kalima, 2008; Sherbloom-Woodard, 2002; Zisa, 2016).

Craig (2003) identified four types of slang in instant messaging conversations namely phonetic replacements, acronyms, abbreviations, and inanities. An example of phonetic replacement is the incorporation of number 1 into everyone, turning it into ‘every1’. Popular examples of acronyms are ‘omg’ and ‘lol’. While the first one means ‘oh my god, the latter means ‘laugh out loud’. According to Craig (2003), abbreviations include vowel-drop shortenings and drastic shortening, such as from ‘people’ to ‘ppl’ and ‘because’ to just ‘bc’. Quoting Craig (2003), inanities refer to “neologisms, compositions of several slang categories, or simply nonsensical transmogrifications of another word”, and one common example is ‘lolz’.

Similar to Craig’s identification of slangs, Barseghyan (2013) listed some types of internet slangs that included letter homophones, punctuation, capitalisations and other symbols, onomatopoeic spellings, keyboard-generated icons and smileys, leet (leetspeak), flaming (also known as bashing), shortening (acronyms and abbreviations), clipping, compounding, and derivation. Tables 1 and 2 below display a summary of the categorization of slangs listed by previous scholars, along with their examples of use.

Table 1
Craig (2003) ’s classification of slangs

Craig (2003)	Example
Phonetic replacements	Ur, every1
Acronyms	OMG, LOL
Abbreviations	Ppl, bc
Inanities	lolz

Table 2
Barseghyan (2013) ’s classification of slangs

Barseghyan (2013)	Example
Letter homophones, punctuation, capitalizations and other symbols	Lol, !!!!!
Onomatopoeic spellings	<i>hahaha</i>
Keyboard-generated icons and smileys	:)
Flaming	(the act of bashing)
Shortening (acronyms and abbreviations)	srsly (seriously)
Leetspeak	w1k1p3d14
Clipping	exam (examination)
Compounding	line, name, down,
Derivation	cyber-, de-, en-, giga-

This study adapted the classifications of slangs as displayed in both Tables 1 and 2. The components of these two schemes appear to be overlapping with each other. There are schemes that will be merged and treated as one component, such as acronyms and abbreviation.

In a recent study that has focused on internet slangs among Malaysians, Namvar (2014) reported that Malaysian university students used English-based slang words in their internet communication. Words such as yup, baby, cool, and chicken are among the frequent ones. In another study in the Malaysian context, Hoogervorst (2015) had focused on slangs used by Malay language youth in West Malaysia consisting of Malaysians and Indonesians. The study reported that slang or informal words appeared to be the most widely used.

These past studies focused on slangs used among teenagers and youth, mainly in the English language. However, this current

study aims to fill the gaps left by previous studies by diverging the analysis of the trend of internet slangs among Malay language users. It is essential to note that in this study Malay language users' age group was out of the scope of the study.

MATERIALS AND METHODS

This study applied the digital ethnography method (Garcia et al., 2009), where a 'virtual fieldwork' was done in order to collect research data. Tweets were manually collected using Twitter Advanced Search feature by setting it to show only tweets with *makan* as the selected keyword. The Malay lexical *makan* (eat) was chosen in an effort to make this research more focused. *Makan* is a very popular greeting word in Malaysia where food consumption is a cultural symbol (Tong, 2011). When two Malaysians meet, they do not greet each other with "how are you?", instead, they greet each other with "have you eaten?" (Sardar & Yassin-Kassab, 2013). *Makan* is also a part of Malaysian's favourite leisure activities (Aman et al., 2007). This *makan* culture of Malaysians justifies the suitability of the keyword to be used for the purpose of the present study. It should be noted that this research does not consider the semantic aspects of *makan*.

There has never been a language corpus as large as the one on the internet (Crystal, 2011). Therefore, for the purpose of this research, the collected tweets were limited to the ones containing *makan* as part of the tweet to increase the possibility of collecting

tweets relevant to the Malaysian context and to reduce unnecessary online data noise. Additionally, irrelevant tweets such as spam tweets with extensive links (Yardi et al., 2010), tweets that contained less than one word, and repeated tweets were also discarded.

Content analysis was used as a primary method because it was widely used for the analysis of content generated by existing and naturally-occurring repository information. In this study, naturally generated tweets from Twitter users were collected first. This was followed by the classification of these tweets into (but not limited to) their types of slangs as conceptualized by both Barseghyan (2013) and Craig (2003).

A total of 2500 tweets that utilized the keyword *makan* were retrieved using the Twitter Advanced Search and Twitter Archiver plugin. The tweets were then filtered through a manual elimination process by expelling spams and irrelevant tweets using the clustering method. Relevant and irrelevant tweets were clustered until the relevant group of tweets reached a reliable level of data saturation. The final number of tweets were then labelled into their slang categories through the extraction method. It should be noted that one tweet might contain more than one type of slang.

RESULTS AND DISCUSSIONS

The analysis of data revealed that Malaysian Malay language Twitter users showed an interesting use of internet slangs. More specifically, the study showed that most

Malay language users applied code-mixing and code-switching in their tweets, particularly between Malay and English. Although code-mixing and code-switching are not of interest in this current study, the samples of data presented here are inclusive of those tweets written in Malay and English. The categorization of internet slangs was carried out according to the discussions by Barseghyan (2013) and Craig (2003). However, some more additional slang categories were reported in this current study. The variations of internet slangs and their samples of use by Malaysian Twitter users are discussed as follows.

Shortenings

This category of internet slang is seen to be useful in simplifying texts due to the nature of Twitter that only allows 280 characters per tweet. **Yg**, a Malay preposition that stands for [**yang**], was the most frequent shortened word used in the data with the occurrences of 46 times, followed by **nk** (32 times) and **org** (22 times). Referring to Craig (2003), **yg** and **org** were drastic forms of shortening because both vowels and consonants were eliminated in them.

Meanwhile, **org** and **ckp** were vowel-drop shortened Malay words. **Org** [**orang**] and **ckp** [**cakap**] meant ‘because’ and ‘say’, respectively. The shortening occurred through eliminations of all vowels, leaving only the first, third, and last consonants. Readers could understand this type of shortening due to the phonetic nature of the consonant; Malay language spelling is in the *v*, *cv*, and *cvc* patterns. Removal of supporting vowels from the words seemed to help Twitter users saved their typing time.

Samples of tweets that incorporated shortenings are as displayed in Table 3. Samples (iv) and (v) presented a type of shortening that requires the omission of the first letter of the first syllable of the word. The word **rumah** (house) is shortened to **umah** by omitting the first letter, while the first syllable in the word **macam** (like, such as) is omitted, leaving only the shortened version **cam**. However, there is no particular rule in shortening words in terms of eliminating vowels or omitting letters and syllables. Different users seemed to develop different styles, and even the same users tended to develop different styles.

Table 3
Shortenings

No.	Shortenings	
i.	<i>I tk faham kenapa ada org yg makan creampuff tapi taksuka cream banyak?</i>	yang
ii.	<i>Tringin nk makan cheesee nuggetttt</i>	nak
iii.	<i>Sorry ahh sis kalau tengok org mmg macam nak makan org tu</i>	orang
iv.	<i>Rela tak makan kalau takde housemate masak kat umah. Tak</i>	rumah
v.	<i>Tadi pergi kaunter nak bayar makan, sebelum ni minta bill je kan, pastu tetiba cam rajin nak gerak kaunter</i>	cam

Acronyms and Abbreviations

Lol, **omg**, and **idk** which were all English abbreviations are equally the most frequent form of acronyms found in the data, with the occurrences of 18 times. There was consistency when it came to using acronyms and abbreviations online. For example, **lol**, **omg**, and **idk** were all the combination of the first letters of common phrases such as [laugh out loud], [oh my god], and [I don't know]. **Lol** is often used to indicate a funny situation or thoughts, and it is also sometimes used in a sarcastic manner. Meanwhile, **omg** is often used to express surprise, excitement, or disbelief (Lexico, 2019). **IG**, found 4 times in the data, is also a commonly used abbreviation referring to Instagram, a photo-sharing social media application. This particular finding is consistent with Eble's (2009)

statement regarding slangs that function as a trendy language. Samples of tweets for this category are displayed in Table 4.

Onomatopoeic Spellings

The use of onomatopoeic spellings can be seen in Table 5. In the first sample, the user typed a long **hahahahhahahah** to indicate long laughter. A total of 47 variety of onomatopoeic spelling of laughter were found in the data, including **haha**, **hahaha**, and **hahahaha**. According to Larson (2015), a different amount of **ha** indicated different responses to the content of a conversation. **Haha** indicates a genuinely amused response, while **hahaha** signals that someone is really amused. **Hahahaha** or other longer forms of **ha**, on the other hand, are used in response to truly funny humour, or to laugh at something that is not meant to

Table 4
Acronyms and abbreviations

No.	Acronyms and Abbreviations	
i.	Are those nutritional supplements sachet that they keep consuming good for your body? <i>Kalau kat Malaysia kene kecam la retis2 ni promote makan supplement lol</i>	laugh out loud
ii.	I am deadly hungry, last <i>makan 25 jam yang lepas omg #iamdead</i>	oh my god
iii.	Idk how to describe <i>muka happy deena dapat ayam goreng. Satu zura ni memang suka beli mcd for 3pax lepastu acah je makan tu</i>	i don't know
iv.	<i>Mashallah sedapnya tengok orang makan kat ig ni ya ampun</i>	Instagram

Table 5
Onomatopoeic spellings

No.	Onomatopoeic spellings	
i.	<i>sedappp laaa. makan mcm tu ja. kalau makan ngan nasik maybe tak sedap hahahahhahahah aku nak p try nanti</i>	hahahahhahahah
ii.	<i>kenyang makan popcorn burpp hm</i>	burpp
iii.	<i>akibat makan asam dalam botol terlebih prottt prottt dari tadi</i>	prottt prottt
iv.	<i>sempat makan apa je?? soto? ke mee udang banjir?? family kak asma jarang makan luar so tak tahu sangat pun apa yg special kat sini sobs</i>	sobs
v.	<i>my husband keluar g cari makan, but i miss him already. huhu</i>	huhu

be funny in the first place. Arbitrarily, a short *haha* may also be used in a sarcastic manner as a reaction towards something that is not humorous or funny or to show no further interest in the conversation.

Referring to the other sample of tweets, an onomatopoeic spelling of a burping and farting sound is used instead of just using the Malay words *sendawa* (burp) or *kentut* (fart). Meanwhile, for the samples that contained *sobs* and *huhu*, the spellings helped the users to express a somewhat sad feeling, as those onomatopoeic spellings resemble the sound of a person crying or sobbing. This type of spellings seemed to provide colours to the tweet, besides helping Twitter users to express their emotions or situations.

Phonetic Replacements

Phonetic replacements are found in the combination of letters and numbers that links to multiple sounds or meanings. Based on observations made, phonetic replacements created by Malaysian Malay language users are a more ‘advanced’ and complex level compared to English-based phonetic replacements, as the actual meaning behind each word is not limited to only one language, but two. In Table 6, **2r2** is a combination of two numbers and

one letter. In this newly formed word, the numbers are pronounced as “two”, which is an English word, while the letter ‘r’ is pronounced as “ar” - a result of an even more colloquialized pronunciation of “lah”, a common tag word in Malay. Therefore, the overall combination of the words results in the creation of a Malay phrase “*itulah tu*”, a colloquial phrase commonly used to show agreement. The same phonetical concept is applied to the second example, **21ku**, where the number **1** carries the phonetic of the morpheme **a** (pronounced with a diphthong) in the word *tuanku*.

In sample (iii), the letter **x** was used to carry the meaning of *tidak* (no). By far, this is the most popular phonetic replacement symbol that has appeared throughout the whole data with the occurrences of 26 times. The use of letter **x** is also commonly accompanied by other words such as *yah*, to contribute to creating a whole new phrase which is *tak payah* (unnecessary). Other examples of the use of **x** are **xpe** [*tidak mengapa*] (it is okay) and **xkisah** [*tidak kisah*] (I don’t mind). Sample (iv) shows the use of **aq** to resemble the word *aku* (I), however, the phonetics of the letter **q** and *ku* are not exactly homogenous. Phonetic replacements involve a certain level of creativity to be understood and to

Table 6
Phonetics replacements

No.	Phonetic replacements	Actual spelling
i.	2r2 <i>camne tah makan banyak boleh kurusz. Jealous ter0kx</i>	<i>itulah tu</i>
ii.	<i>Ada makan-makan tak 21ku</i>	<i>Tuanku</i>
iii.	<i>trus x berselera nak makan...</i>	<i>tidak</i>
iv.	<i>aq harap satu hari nnty bile makan kat kedai dgn family, aq yg keluar duit</i>	<i>aq</i>

be created in the first place, as they integrate morphemes and phonetics rule to generate symbols that carry a certain meaning of an actual word or phrase.

Inanities

Referring to Craig (2003), inanities refer to neologisms, compositions of several slang categories, or simply nonsensical transmogrifications of other words. Inanities may also include completely new words or expressions, combinations of several slang categories, or simply nonsensical variations of other words. In the first three samples of tweets in Table 7, the users added nonsensical spellings in their tweets, such as *ksksjskkkazksksjsjskaokskaka* and *hsjdjsdjs*. Although they carry no meaning, they serve as emotional expression. In sample (ii), it can be seen that the user might be expressing his/her feelings by emphasizing

the words *lapar* (hungry), *nak* (want), *makan* (eat) and *gemuk* (fat) by duplicating the last characters of each word several times. Drawing on Craig (2003), these are the matching examples of nonsensical transmogrifications of words.

A similar linguistic phenomenon can also be seen in the third sample where the user repeated some letters in the word *yes* (spelled as *yezza*) to emphasize the intensity of a certain emotional expression. Another type of inanities is the frequent use of *iolls*, *uolls*, and *weolls* which simply mean **I**, **you**, and **we**, respectively. This type of inanity which is applied to pronouns often occurs in a Malay structured sentence, but with the insertion of transmogrified English words. The transmogrification occurred in addition to a root word such as **I**, **you**, and **we**. The use of this type of inanities can be seen in samples (i), (ii), and (iii) listed in Table 8.

Table 7
Inanities

No.	Inanities
i.	<i>laparr nakkk makannn tapiiii dah gemukkksss kskjskkkazksksjsjskaokskaka</i> laparr nakkk makannn tapiiii ... gemukkksss kskjskkkazksksjsjskaokskaka
ii.	<i>dia tak pernah makan shihin. hsjdjsdjs but every malay mom is like that "ko nampak tu tulisan cina tu mesti tak halal"</i> hsjdjsdjs
iii.	<i>Dad: so u tak makan after 6pm? Me: yezzzzaaaaa Dad: ok you eat now</i> yezzzzaaaaa

Table 8
Inanities (in addition to root word)

No.	Inanities (in addition to root word)
i.	<i>Selamat petang, saya tengah makan karipap. uolls makan apa tu?</i> you
ii.	<i>Bila nak dtg singgah rumah iolls ni jom lah kita makan mcd ke apa</i> i
iii.	<i>first time makan kafe brothers ni weolls tak biasa</i> we
iv.	<i>Takde yg nk teman ke. Pishang nya makan sorang2</i> pisang
v.	<i>Untung ah dah masyuk. Aku dah tiba masa utk makan nasi bujang</i> masuk

Based on the researcher’s observations and understanding, inanities that occurred in addition to Malay based root words such as in tweet samples (iv) and (v) carry the meaning that is expanded from the original semantic meaning. In sample (iv), the slang *pishang* is meant to refer to the word *pisang* in Malay, which dictionary-wise means **banana**. Internet slang-wise, *pishang* refers to the state of being **bored**. A similar explanation applies to sample (v), where the transmogrification of the Malay word *masuk* (enter) into *masyuk* no longer carries the initial meaning, but has been expanded to ‘having more money’ or ‘having just received one’s salary’. In addition to users’ creativity in transforming words, subconscious knowledge of metalinguistic is probably one of the reasons that can explain the derivation of these slangs. This

is because patterns vary among users. This type of inanity is being widely used and these inanities occurred 29 times in the data of this study.

Cacography

Cacography is a deliberate comic misspelling (Watkins, 1994), which is also a type of humour. In this study, most of the instances of cacography occurred in Malay and English. Clearer examples can be seen in Table 9 and Table 10.

Cacography used in Malay involved the respelling of words in an illogical yet creative way. This can be attributed to the nature of the Malay language which is usually phonetical, whereby most words are pronounced exactly the way it’s spelt. However, in the case of Malay cacography such as those displayed in Table 10, it shows

Table 9
Cacography (Malay)

No.	Cacography (Malay)	
i.	<i>malam ni taktau nak makan aperw</i>	apa
ii.	<i>Dey hakak makan skali berkali2 laaaaa diet kelaut..</i>	kakak
iii.	<i>Wuh lega dpt makan kat kedai FRIM tu . Ayam goreng boek dia hahah</i>	boek
iv.	<i>Eksited nak makan meatball lettew</i>	lah tu
v	<i>Nape sayang? Kenyang makan durian kerw tu?!?</i>	ke (-kah)

Table 10
Cacography (English)

No.	Cacography (English)	
i.	<i>pebenda bubuk setabak dalam list tempat makan terbaik ni nak kena pukul ke</i>	Starbucks
ii.	<i>how can he look that good ??? even bila tengah makan ????? aaaaaa boi, ure unreal</i>	boy
iii.	<i>aku pantang betul gi kedai makan then budak2 nangis pastu makbapak dia biar je. pls la bij</i>	bitch
iv.	<i>Laparnya. Macam nak makan Mekdonel je.</i>	McDonald’s
v.	<i>I kenod makan laksa yg jenis bau ikan dia kuat wey</i>	cannot

that most words are respelled with the purpose of making them sound humorous and to provide ‘attitude’ to the person posting the Tweet, without considering the actual pronunciation of the words. This particular finding is in relevance to Eble’s (2009) argument which states that slang is a ‘language with attitude’. In sample (iii), the word *baik* is spelled as *boek*, which does not sound familiar in Malay daily speech, therefore making it awkward and somewhat humorous at the same time.

For cacography that occurred in English, some of the words are localized into a Malay C-V-C-V pattern of spelling, such as the slang for example (i) where **Starbucks** is spelled as *setabak*. Cacography that occurred within the English language also happened in a way where the users not only respelled the words to imitate the actual pronunciation but rather colloquialized it into their own style of pronunciation. Based on the examples, it can be seen that the letter **s** in **McDonald’s** is fully eliminated in *Mekdonel* which is the newly created spelling.

For example (v), the user spelt **cannot** as *kenod*, which not only mimicking their way of pronouncing it but also stressing on the sound of the last letter, **t**, which is replaced by **d**. Referring to the earlier part of this section, cacography is seen to have similarities with phonetic replacements. However, these two can be distinguished by the ‘attitude’ carried in the meaning (Eble, 2009). Phonetic replacements are usually used to respell an English word to fit the Malay spelling systems without

changing the semantic meaning, while cacography is used to exaggerate a message and to highlight playfulness by inserting a humorous or probably cynical hint through its spellings.

These adjustments which were done on English words are believed to happen because users are used to speaking English with a Malay accent in their daily speech. Subsequently, in order to convey their daily speech into writings *phonetically*, modifications of spellings of those English words are made. Based on observations, cacography is applied to their tweets depending on the users’ creativity, but it also seemed to help in reducing the number of characters used in order to abide by Twitter’s character limit.

Repetition

After shortenings, repetition that occurs through word elongation is among the most frequent types of slangs found in the data. Repetition mostly occurred in the last letter of each word, or in some cases, the middle letters. Samples of tweets are displayed in Table 11.

O’Connor (2013) mentioned that there were reasons behind word elongation or repetition like these, such as acting as an iterative intensifier. O’Connor listed subcategories like ‘reluctant interruption’ that was portrayed in the sample (v) through the repetition of the conjunction *tapi - tapiiii* (but). Another example of iterative intensifier under the ‘keening’ subcategory can be seen in the sample (ii) through the elongation of the interjection *wah - waaa*

Table 11
Repetition

No.	Repetition
i.	<i>mcd's manager for monthsssss. perut buncit sebab hari hari makan patties</i> monthsssss
ii.	Waaa <i>alhamdulillah haaza min fadhli robbi Sempat makan apa je??</i> waaa
iii.	<i>Kenapa fikir lunch dekat penang hello later lunch nak makan apaaaa ugh</i> apaaaa
iv.	<i>kakak dah besar, nanti umi bagi duit minyak dgn makan semua" ohmannnn i wanna cryyyyyyy nak ikuttttt</i> ohmannnn, cryyyyyyy, ikuttttt
v.	<i>Laparrr nakkk makannn tapiiii dah gemukkksss</i> tapiiii

(wow). Sample (iv) signals a pleading tone through the repetition of the interjection **oh man - ohmannnn** and the verb **cry - cryyyyyyy**, while samples (i) and (iii) are acting as iterative intensifiers, which are very much alike to ‘screaming’ online.

Punctuations and Capitalisations

Punctuations and capitalizations are commonly used for emphasis or stress. Periods or exclamation marks may be used repeatedly for emphasis. Examples of this are displayed in the sample of tweets given in Table 12.

Samples (i) and (ii) display the use of exclamation mark and question mark repeatedly. In sample (i), the context of the tweet shows that the user is expressing a strong emotion by adding multiple

exclamation marks and question marks. In samples (iii), (iv), and (v), the use of all capital letters (or *caps lock*) carries different purposes. Samples (iii) and (iv) show that the users are expressing enthusiasm, while sample (v) displays a stronger emotion. The use of all caps resembles screaming or yelling, and have the tendency to make the words seem ‘louder’. The use of all caps is also helpful in conveying “grandeur,” “pomposity,” or “aesthetic seriousness”, as stated by Luna in Robb (2014).

Emoji

Emoji is a word originating from Japanese to describe a type of ideogram used as a form of pictorial communication in

Table 12
Punctuations and capitalisations

No.	Punctuations and Capitalizations
i.	Parents that couldnt control their little kids would be the death of me. <i>Anak kau diri atas counter makan kau masih buat bodoh. Omg!!! I cant even?!?????????</i>
ii.	Omg stop harassing me <i>abg cafe gatal!!!! Stop ajak me makan kfc!!! I dont want kfc i want A&W!!!</i>
iii.	<i>Aku enjoy tengok org makan tapi mostly aku paling happy tengok girls yg so into the food and they look so excited to eat like that's so adorable</i> YESS BBY EAT A LOT!! YOU EAT THAT FOOD AND BE HAPPY!!
iv.	TAK SABARNYAAA NAK MAKAN KUIH RAYAAAA AAAAA
v.	<i>Kau nak complain macam macam kata waiter tu bodoh ke apa just because they are indian,</i> TOLONGLAH MAKAN DEKAT RUMAH SENDIRI

electronic messaging on mobile telephones and internet web pages. Deriving from the kanji for ‘picture’ and ‘character’, the word emoji is a contraction which can be roughly translated as a pictograph. In the topic of *makan*, the use of emojis is very helpful in helping users to express their thoughts and feelings more accurately, such as in the examples below. In Table 13, example (i) shows multiple food emojis being used in a single tweet. The food emojis include **poultry leg, hamburger, French fries, pizza, hot dog, taco, burrito, and popcorn**. While in example (ii), the user mentioned the word cookies in his/her tweet and continued to further express the tweet by attaching a **cookie** emoji at the end of a tweet. Example (iii) is also a tweet with food-related emoji, which includes the use of **‘face savouring food’** emoji. The use of that particular emoji helped the user to express their current mood, in addition to the written tweet. The user in Example (iii) wrote that he/she is going to eat, therefore the ‘face savouring food’ emoji helped to express his/her mood in regard to the activity.

Emojis used in online communication among Twitter users are not specifically ‘linguistics’, as it is general and does not

belong to any language is specific. However, due to the absence of intonation and prosody in written texts, emoji serves as an additional function to help users express their tweets alongside language more accurately.

DISCUSSIONS

This study aimed at investigating the variations of slangs used by Malaysian Malay language users in online communication. It was found that the language used by Twitter users had transformed the nature of written Malay. Some of the transformations resembled daily speech written down, while some transformations were found to have been exaggerated. This finding coincides with Crystal’s (2001) description of written speech because it is mainly written although it reflects the features of informal speech.

Twitter users make the most of their ‘writing skills’ to be as creative as possible in order to ensure that their messages reach the audience exactly the way they want it to be. Although some internet slangs might not make sense at first, each of the slangs serves a certain purpose, and it is mainly to ease communication among ‘those who understand’, namely, the community of Twitter users. This finding supports Eble (2009) who stated that slang was a “linguistic expression of social affiliation”.

Internet slangs provide rooms for users to express themselves more colourfully through short texts, such as through the use of onomatopoeic spellings. To convey messages in short form and quickly, abbreviations or acronyms have come into use. These slangs help users to save

Table 13
Emoji

No.	Emoji
i.	<i>Nah, jgn lupak baca doa makan</i> 
ii.	can't stop <i>makan</i> cookies 
iii.	Stress?? Dont worry <i>jom makan</i> 

typing time, and to provide instant replies to the other party they are communicating with. The room for self-expression also emerged through the use of cacography, where they altered real spellings to the spellings that they think will help to portray how they actually speak in real life and to convey emotional nuances more accurately compared to the ‘boring’ correct spellings.

Meanwhile, as much as ‘transferring’ daily speech into writings helped to ‘colour’ their conversations, inanities, and leetspeak seem to appear exclusively in online communication, as they emerged due to users’ creativity in modifying spellings. These spellings are almost impossible to be articulated in real speech. Apart from all the modifications made to written language, the emergence of emoji also helped Twitter users to convey their messages more accurately. Technically, emojis are similar to keyboard generated smileys as listed by Barseghyan (2013). However, emojis are a more recent invention that contains a

richer variation of expressions, including families, buildings, animals, food objects, mathematical symbols, and more.

The current study found two more variations of slangs that are popular among Twitter users, namely cacography and emoji. These findings also support Crystal’s opinion in an interview with Young (2013) that people are prepared to create new words, which is a good development. By integrating the initial classifications of slangs with the classifications found in this study, a new list of internet slang classification that is relevant to the study was designed, as given in Table 14.

This study revealed that perhaps the word *makan* itself was a slang word after all, although it might not be an internet slang exclusively. Tweets analyzed in this study showed that although the users constructed a full English sentence, they tended to replace the word *eat* with the Malay word *makan*. Based on this observation, it shows that some Malaysian Malay language users

Table 14
Internet slang classification

Categories of slangs	Examples
Shortenings	<i>org (orang)</i>
Acronyms and abbreviations	omg (oh my god)
Onomatopoeic spellings	Huhu (the sound of a person sobbing)
Phonetic replacements	<i>2r2 (itulah tu)</i>
Inanities	Hsjdjsjdjs (to indicate laughter)
Inanities in addition to the root word	iolls (i)
Cacography (Malay)	<i>aperw (apa)</i>
Cacography (English)	<i>kenod (cannot)</i>
Repetition	<i>laparrrr</i>
Punctuations and capitalisations	!!!!!! , <i>TOLONGLAH</i>
Emoji	

might be more comfortable using English in their Twitter conversations. However, they may be comfortable in expressing themselves as a Malaysian by interjecting the word *makan* in their English tweets, making it a unique kind of Malaysian slang. This revelation also seemed to clearly reflect the *makan* culture of Malaysians as discussed earlier in this paper.

CONCLUSION

Looking back at its definition, slang is invented to serve the important function of identifying people as members of a group. Twitter is a subculture in its own class, drawing a distinction between the internet and the 'real world'. Therefore, the Twitter community itself is identified as a group of people with similar interests, regardless of their age groups. Social media have evolved the way people use language. It is considered a big contributor to the evolution of our language. Some slangs might be temporary, but the linguistic creativity behind the people who created and use slang will probably continue to grow as new internet users will try to assimilate into the subculture. The current study has served as preliminary research on the slangs used by Malaysian Malay language users. Further studies involving a larger corpus and a wider group of internet users are suggested to uncover more unambiguous findings of internet language.

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Interactional Metadiscourse Strategies in Academic Discourse: An Analysis of Research Articles Produced by Arab Writers

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ABSTRACT

Interactional metadiscourse (MD) features in academic writing have gained much currency in today's research. These features are manifested through various linguistic devices which express epistemic stance and sensitivity to audience. Although a large body of research on interactional MD has been produced, little attention was given to the study of these features in L2 writing in the Arabic context. This paper examines the extent to which Arab L2 writers deploy interactional MD strategies in academic writing. In this context, a corpus of 20 applied linguistics research articles (RAs) were compiled. Following Hyland's MD taxonomy, interactional MD features were identified and analyzed. Based on Hyland's MD model, the analysis was conducted using ANTCNC, a corpus analytical software. Compared to existing research on MD, the findings indicate that Arab L2 writers tend to use limited MD resources in their writing. The findings also reveal that there is a lack of balance in the use of interactional MD types in the corpus. Some interactional MD types are heavily used while some others are scarce. The discussion section of RAs received

the highest frequency of interactional MD whereas the methods sections received the lowest. Based on these findings, some pedagogical implications for developing interactional competence of Arab L2 writers are discussed.

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INTRODUCTION

The study of interactional features in academic writing has generated an increasingly growing interest as they are conceived as essential for building writer-reader relations. A wide range of studies have so far been conducted on the role of these features in academic writing (Abdollahzadeh, 2011; Hyland, 1996, 2017; Koutsantoni, 2006; Lee & Deakin, 2016; Thompson, 2001). As opposed to the so called 'propositional features', interactional features of discourse are often deployed to guide readers as discourse participants and express the writer's attitude towards the content and the audience. In this way, discourse does not merely consist of content but also involves the writer's purpose and attitude towards the content and readers (Crismore et al., 1993; Hyland, 2005; Kopple, 1985). In today's research, such features are referred to as metadiscourse strategies. Metadiscourse (MD henceforth) is referred to as rhetorical and pragmatic strategies that do not contribute to the content material of discourse but guide the reader to understand the subject matter and help writer to express one's views and attitude. MD is subdivided into two major features, labelled by some theorists as textual and interpersonal (Crismore et al., 1993; Kopple, 1985) and interactive and interactional MD by some others (Hyland, 2005). The former (interactive) concerns the organization of discourse such as *moreover*, *therefore*, *however*, *to sum up*, *in other words*, *see section x*. whereas the latter (interactional) helps writers to express one's

views and attitude towards the content and the audience; examples of such expressions include *might*, *would*, *probably*, *definitely*, *unfortunately*, *let us consider*, *note*.

Since the emergence of the term metadiscourse in 1980s, there has been an abundance of research devoted to such pragmatic phenomenon across various languages, genres, argumentative writing and so forth. Many studies conducted on metadiscourse have stressed its importance in various fields of study including persuasive writing (Crismore et al., 1993), RAs (Dahl, 2004; Hyland, 1998; Koutsantoni, 2006), journalistic discourse (Dafouz-Milne, 2008; Le, 2004), post-graduate dissertations (Hyland, 2004) and so forth. In addition, a proliferation of research compared MD across languages including MD in English and Finnish (Crismore et al., 1993), MD in English and Spanish (Milne, 2003), MD in English and Persian (Kuhi & Mojoood, 2014); MD in English and Chinese (Kim & Lim, 2013), and MD in English and Arabic (Alotaibi, 2015; Sultan, 2011).

Research on interactional MD in L1 English and non-native writing indicates that there exist some rhetorical variations among writers of different cultural background (Crismore et al., 1993; del Saz Rubio, 2011; Kim & Lim, 2013; Yagiz & Demir, 2014). Given the pragmatic and rhetorical nature of MD, writers of different cultural background tend to employ different rhetorical strategies in writing (Abdollahzadeh, 2011; Crismore et al., 1993). According to Hinkel (2003), interactional MD features in academic writing are essential for accomplishing

persuasion in an Anglo-American context. Unfortunately, L2 writers tend to focus on the content and pay little attention to the purpose of writing (Cheng & Steffensen, 1996). Specifically, the literature on interactional MD in Arab L2 writing has established that Arab L2 writers seem to encounter some problems deploying MD strategies in writing appropriately (Alkaff, 2000; Alward, 2014). Investigating MD strategies in professional journalistic writing by Arab L2 writers, Alkaff (2000) reported that Yemeni journalists did not seem use MD markers in a way that met the expectations of native speakers of English. Investigating the use of hedges and boosters as interactional MD strategies in Arab undergraduate L2 writing, Alward (2014) showed that Arab L2 writers tended to encounter problems utilizing hedges and boosters appropriately. While Alkaff's (2000) focused on the use of MD in Arab journalistic writing, Alward (2014) investigated the use of hedges and boosters in undergraduate students' essays. Nevertheless, according to our knowledge, it seems that no research has so far been conducted to address the way in which interactional MD strategies are deployed by advanced Arab L2 writers. Due to scarcity of research on interactional features by Arab L2 writers, Yagız and Demir (2014) suggested furthering research to explore the use of these features by Arab graduate writers. Therefore, it seems clear that there is a pressing need to highlight such an issue so that it might have a fruitful contribution to the development of interactional competence of Arab L2 writers.

This study derives its significance from the importance of interactional MD strategies which are the most prominent conventions in academic writing (Hyland, 1998, 2005; Lee & Deakin, 2016). It is suggested that interactional MD strategies are highly significant particularly in English academic prose as they help writers explicitly signal their intentions and communicate effectively with members of the academic community (Hyland, 2005). Therefore, the use of such important resources in RAs is essential for establishing persuasive appeals. Thus, it is anticipated that the findings of the present study would be useful for the teaching of academic writing to future Arab L2 writers.

As stated above, MD consists of interactive and interactional features. We focus only on interactional MD features due to the fact that these features have received quite insufficient attention in research and non-native writing courses compared to connectives and modals (Dafouz-Milne, 2008; Hyland, 2005). The purpose of this paper is to identify the use of interactional MD resources by Arab writers in RAs. Secondly, given the fact that each section within RAs serves particular rhetorical functions and hence requires certain linguistic realizations (Swales, 1990), we also aim to explore the pattern of interactional MD resources across the different sections of RAs: introduction, methods, results and discussion (IMRD). In this respect, two questions are posed: 1) To what extent do Arab L2 academic writers employ interactional MD strategies in research articles? 2) What is the distribution

pattern of interactional MD across RAs sections written by Arab L2 writers?

THEORETICAL UNDERPINNINGS

Discourse is characterized as a social action which is produced within a particular context for a particular purpose. In this way, it does not only consist of information but also includes other features that guide the audience and help writer express one's purpose and attitude. While the former may be linguistically referred to as propositional discourse the latter is often labelled as metadiscourse. Despite the abundance of studies on MD (Crismore & Fransworth, 1989; Crismore et al., 1993; Hyland, 2017; Kopple, 1985, 2012; Milne, 2003) its definition has remained relatively fuzzy due to the wide range of resources that may count as metadiscourse. Swales (1990) stated that "although the concept of metadiscourse is easy enough to accept in principle, it is much more difficult to establish its boundaries."

The fuzziness of the term MD may also be manifested by its initial definitions as talk about talk, writing about writing or discourse about discourse. For example, Williams (1981) refers to MD as "Writing about writing, whatever does not refer to the subject matter being addressed." Similarly, Kopple's (1985) views MD as discourse about discourse. Such characterization implies a lack of explicitness as to which linguistic features should be considered MD and which should not. Moreover, the concept remains fuzzy due to the relatively imprecise line between propositional and non-propositional material. According to Kopple

(1985), discourse consists of two levels: propositional discourse and metadiscourse. The former expresses certain states of affairs whereas the latter (i.e. metadiscourse) comments on the propositions presented. On their part, Crismore et al. (1993) define MD as linguistic material that do not add anything to the content but guide the reader to understand the text and expressed the writer's attitude. According to these views, MD is considered as an additional material to the propositional content and thereby may not be central to the communication process. However, Hyland (2005) sees that both metadiscourse and propositional discourse as two components of the same communicative act. Thus, Hyland (2005) defines MD as "the cover term for the self-reflective expressions used to negotiate interactional meanings in a text, assisting the writer (or speaker) to express a viewpoint and engage with readers as members of a particular community."

As far as the classification of MD is concerned, most MD theorists classify it based on Halliday's tripartite taxonomy of language functions: ideational (propositional discourse), textual and interpersonal functions (non-propositional discourse i.e. metadiscourse). Kopple's (1985) taxonomy was built based on Halliday's macro functions of language as well as Lautamatti's (1978) initial notions of topical and non-topical discourse. He classified MD into two major categories: textual and interpersonal MD. He subcategorized these macro functions into seven categories: text connectives, code glosses, illocution markers, validity

markers, narrators, attitude markers and commentary. Kopple's model was utilized to analyze MD features in various studies of MD. Crismore et al. (1993) based their taxonomy on Kopple's though they refined it by sub-categorizing textual MD into two categories and collapsed 'narrators'. Milne (2003), in turn, based her model on Crismore et al. (1993) but she modified the model to suit the journalistic genre she analyzed. The most recent classification of MD is the one proposed by Hyland (2005). Hyland contended that all types of MD were interpersonal in nature since metadiscourse was used to convey the intended meaning of the writer. Despite the critique it has received in the inclusion of evidentials in the textual rather than the interpersonal category (Thompson, 2008), Hyland's model seems to have avoided theoretical problems associated with previous models by setting some explicitness principles for delimiting the boundaries of MD so that MD features can be distinguished from the 'propositional content'. Moreover, Hyland's model is genre-based since it has been designed based on a large corpus of RAs (Ho & Li, 2018), and has proven useful in many studies of MD such as (del Saz Rubio, 2011; Ho & Li, 2018; Lee & Deakin, 2016). Following Thompson (2001), Hyland categorized MD into interactive and interactional features; the former "presents out text interactively" whereas the latter "involve the reader collaboratively in the development of the text." (Hyland, 2005). According to Hyland's model, interactional MD consists of five sub-categories, namely hedges,

boosters, attitude markers, self-mention and engagement markers. Below, we elaborate on each of these sub-categories in turn.

Hedges are expressions such as *may*, *probably*, *seem*. which are mostly used to present content less categorically, express uncertainty and show the writer's lack of commitment to show deference to audience. However, there seems no unanimous agreement about a unified list of the linguistic manifestations of hedges (Varttala, 1999). Varttala suggested that the most common hedging expressions included modal auxiliaries (e.g. *may*, *could*), epistemic verbs (e.g. *appear*, *seem*), adjectives (e.g. *probable*, *possible*) and adverbs (e.g. *probably*, *presumably*). As the use of hedges is essential to express deference to audience, the use of boosters is perceived as equally important to mark the writer's authority. Boosters are manifested through different expressions such as emphatic verbs (e.g. *believe*, *demonstrate*) amplifying adverbs (e.g. *clearly*, *definitely*) emphatic adjectives (e.g. *clear*, *obvious*.). Attitude markers, the third sub-category of interactional MD are also characteristic of academic metadiscourse. Unlike hedges and boosters which indicate epistemic attitude towards the propositions, attitude markers are used to signal affective attitude. They are often used to signal surprise, agreement, importance, frustration, obligation (Hyland, 2005). Thus, attitude markers are realized by markers showing attitude including attitude adjectives (e.g. *appropriate*, *considerable*) adjectival clauses (e.g. *it is important*, *it is unfortunate/surprising*) attitude adverbs

(e.g. *unfortunately, surprisingly*) attitude verbs (e.g. *agree, prefer*). Engagement markers are used to explicitly address readers in order to engage them in the unfolding dialogue. This category is mostly realized by markers addressing the readers including directives such as *note that, consider*, pronouns e.g. *you/we many* and obligation modals such as *should*. In the next sections, we present the corpus and the methodology employed to identify and analyze these interactional MD in the selected research articles.

CORPUS AND METHODOLOGY

The corpus used in this paper is based on RAs written in English by Arab L2 writers. The selection of RAs was confined to the field of applied linguistics as one of the established academic disciplines. Table 1 overviews the corpus of RAs analyzed in the study. It consists of 20 RAs (totaling 77600 words) in English written by Arab L2 writers in the field of applied linguistics published during the period from 2016-2017. They were culled from four international peer-reviewed journals in the field of applied linguistics, namely *Arab World English Journal, English Language Teaching, International Journal of English Language*

Education, International Journal of applied linguistics and English literature.

The researchers first ensured that all articles have been written by Arab writers. Obviously, it was not possible to contact each author individually to confirm one’s nativity. However, we identified the Arab nativity of the authors by their last names. Although many non-Arabs may also have Arab first names such as Iranians, Pakistanis, Indians, Malaysians and so forth, Arabs have special last names that often start with the two letters “AL” such as Al-Qahtani, Al-Mudhaffari etc. Despite the fact that the majority of Arab names may have their last names starting with ‘AL’, some others may not. Thus, we excluded all the articles written by authors whose last names do not start with ‘AL’ even though we know that they are Arabs. We also checked the nativity by locating the institutions to which these writers belong.

Having established the nativity of writers, we selected the corpus of RAs for analysis. We set a set of selection criteria to control a number of variables including the topic, the length, the diachronic variation and the type of RAs. In so doing, we aimed to maintain homogeneity of RAs to be selected. This required a relatively rigorous task to accomplish since it was

Table 1
Description of the corpus

RAs				
Introduction	Methods	Results	Discussion	Total
37700	10400	15500	14000	77600

very difficult to control various variables simultaneously as we had to modify the data several times to fit the set criteria. As the topic of the articles may influence the type and number of MD resources used (Crismore et al., 1993; Hyland, 2005; Milne, 2003), all the articles were selected based on a single focus. As most of the articles were conducted on English Language Education, we confined the selection to this topic. Thus, all the articles touching on other topics were discarded. As far as the length is concerned, the articles collected were divergent i.e. they range from 3000 to 9000 and so an average of 6000 words is set as a limit to control the length of articles and hence all articles exceeding 6000 words were excluded. The third criterion to control concerns the diachronic variation. The articles selected were recently published in the last two years from 2016-2017. Finally, the type of the articles was also controlled by limiting the scope to one sub-genre within RAs. According to Swales (2004), there are four sub-genres within research articles, namely theory pieces, review articles, data-based articles and shorter communications. Since one of the set objectives of this paper is to analyze the distribution of interactional MD resources across the different rhetorical sections of research articles, we opted for data-based RAs whose structure normally comprises four sections: introduction, methods, results and discussion and so the other types were ruled out. Ultimately, five RAs were selected from each journal and thus the overall number of the corpus is 20 research articles.

As the study is set to find out the extent to which Arab writers deploy interactional MD strategies in research articles, a quantitative design is employed. The quantitative analysis identifies the frequencies of interactional MD in order to find the extent to which the participants deploy interactional MD markers to project themselves in discourse. As we will see in the next section, the quantitative analysis shows the number and types of MD resources used in RAs as well as the distribution pattern of these features across the different sections of RAs.

To identify the interactional MD resources used in the text of research articles, we followed (Hyland, 2005). Despite the usefulness of other MD taxonomies (Crismore et al., 1993; Kopple, 1985), Hyland's model is by far the most popular, recent and most applied across MD research. Moreover, Hyland (2005) model is considered as well-grounded (Thompson, 2008) and genre-based (Ho & Li, 2018). This model has been utilized in various recent studies on MD as a framework to analyze MD expressions (Alotaibi, 2015; Del Saz Rubio, 2011; Kim & Lim, 2013; Kuhl & Mojood, 2014). Table 2 shows Hyland's model, which is adopted to identify interactional MD markers in the corpus. Having identified interactional MD resources, we conducted a corpus analysis to achieve two purposes, namely identifying the overall frequency of interactional MD features as well as their distribution across the different sections of RAs.

Table 2
Hyland's (2005) model of interactional MD

Interactional Metadiscourse	Function	Recourses
Hedges	withhold commitment and open dialogue	might; perhaps; possible; about; it is clear that
Boosters	emphasize certainty or close dialogue	in fact; definitely
Attitude Markers	express writer's attitude to proposition	unfortunately; I agree; surprisingly
Self-mentions	explicit reference to author(s)	I; we; my; me; our
Engagement Markers	explicitly build relationship with readers	note; you can see that

The corpus analysis was conducted using an analytical software tool named ANTCONC, a software used for text analysis. This tool is very useful for conducting analyses of texts of varying lengths ranging for millions or even billions of words. Using a list of interactional MD expressions provided by Hyland (2005), we conducted a search of this list in the software to generate the frequencies of each MD item in the text. However, we had to analyze each item in its co-text and context to ensure its metafunction. The task was not as straightforward as it might appear; it required such a rigorous work due to the multi-functionality of MD expressions. For example, the word ‘would’ which is potentially a hedge in 1 is considered part of the propositional content i.e. it does not perform a metadiscoursal function and so it was not coded as MD whereas the same expression in 2 is considered metadiscoursal and thus it was coded as MD:

1. She thought blogs would complement what was already studied in the class.
2. This approach contends that learners’

acquisition of grammar and lexis would enable them to read fluently.

RESULTS AND DISCUSSION

The findings indicate that Arab L2 writers tend to pay little attention to interaction in academic writing. The overall frequency of interactional MD features in the analyzed RAs was only 10.95 per thousand words (PTW henceforth). This could be considered as a relatively low frequency taking into account the findings of previous research on interactional MD features. Hyland (1998), for example, reported that the overall frequency of interactional MD in a corpus of RAs accounted for 29.1 PTW. Additionally, Lee and Deakin (2016) found that the frequency of interactional MD by L1 writers was 26.10 as opposed to Chinese ESL’s 23.97 PTW.

Table 3 provides an overview of the frequencies of interactional MD features as well as their distribution across the different rhetorical sections of RAs. The findings revealed that only 851 instances of interactional MD were employed in the

overall corpus. It can be observed that the most frequent interactional category in the corpus is ‘hedges’. Interestingly, the frequency of hedges was 6.26 PTW, a frequency which outnumbers all the other interactional categories altogether. The second highly frequent category was ‘attitude markers’ followed by ‘boosters’ and ‘engagement markers’. Self-mentions; however, were the least frequent in the corpus. A possible explanation could be that EFL writers have often been instructed to avoid the use of these markers in academic writing (Hyland, 2005).

It is worth noting that there is a remarkable variation between the frequencies of the two major stance categories, namely hedges and boosters. Hedges were the most highly frequent category whereas boosters were highly infrequent. Such findings seem to agree with Hyland and Milton (1997) in one aspect but do not in another. The findings of the current study agree with Hyland and Milton’s in that L2 writers tend to deploy limited proportions of interactional MD to

express stance. However, the findings quite disagrees with Hyland and Milton (1997), who found that L2 writers tend to use authoritative tone using greater number of certainty markers than hedges in comparison to L2 writers. This could plausibly be due to the variations across genres and that academic genre is generally argumentative. While Hyland’s and Milton’s study was conducted on argumentative essays, the present study was devoted to RAs genre.

As regards the distribution of interactional MD across RAs sections, and as we see in Table 3, the discussion section received the highest frequency of interactional MD, followed by the results and the introduction whereas the least instances of interactional MD occurred in the methods section. The high frequency of hedges in the discussion section compared to the method section is expected because writers tend to use more interactional MD as they provide their interpretation of findings. Khedri (2014) reported that the results and discussion sections consist of the highest

Table 3
Interactional MD strategies in the corpus

Interactional MD	Introduction		Methods		Results		Discussion		Overall	
	Freq.	PTW	Freq.	PTW	Freq.	PTW	Freq.	PTW	Freq.	PTW
Hedges	254	6.73	27	2.58	133	8.58	144	10.28	558	7.18
boosters	30	0.80	5	0.48	15	0.97	18	1.29	68	0.88
attitude markers	61	1.62	10	0.95	38	2.45	28	2.00	137	1.76
engagement markers	35	0.93	1	0.10	5	0.32	8	0.57	49	0.63
Self-mentions	10	0.27	11	1.05	9	0.58	9	0.64	39	0.50
Grand total	390	10.34	54	5.15	200	12.90	207	14.78	851	10.95

instances of metadiscoursal devices. In what follows, we will overview each category of interactional MD and its realization across the different rhetorical sections of RAs.

a. Hedges

As stated above, hedges received the highest frequency in the corpus. This seems to agree with previous research findings on the use of interactional MD by L1 and L2 writers (Hyland, 1998, 2004; Lee & Deakin, 2016). Hyland (1998), for instance, shows that the use of hedges in his corpus of RAs accounted for more than half of all the interactional resources. A possible interpretation to this may be that academic writers tend to avoid presenting claims categorically and attempt to present content with caution to avoid criticism from their peers.

As far as hedges sub-categories are concerned, it was found that Arab L2 writers tend to employ modal auxiliaries more

predominantly than all the other hedging expressions. It was shown that modal auxiliaries are the most frequent hedging elements followed by epistemic verbs, modal adverbs and modal attributes, and the least subcategory used is ‘circumstances’. L2 writers generally hedge to pay deference to audience, mostly using modal auxiliaries:

- 3. EFL learners *may* find it really difficult to recognize idioms structures.
- 4. This *could* be due to the lack of knowledge of the appropriate strategies that help them learn idiomatic expressions in the target language.

Surprisingly, ‘modal auxiliaries’ is more frequent than all the other sub-categories altogether. This might indicate that writers could lack familiarity with the other hedging features (Lee & Deakin, 2016) which could be employed to achieve more or less similar persuasive functions.

Table 4
Hedges sub-types and their distribution across RAs

Hedges	Introduction		Methods		Results		Discussion		Total
	Freq.	PTW	Freq.	PTW	Freq.	PTW	Freq.	PTW	
Modal Auxiliaries.	142	3.76	21	2.00	83	5.35	86	6.14	332
Modal Adverbs	30	0.80	4	0.38	20	1.29	12	0.86	66
Modal attributes	23	0.61	0	0.00	7	0.45	12	0.86	42
Epistemic verbs	36	0.95	0	0.00	19	1.23	27	1.93	82
Circumstances	23	0.61	2	0.19	4	0.26	7	0.50	36
Total	254	6.73	27	2.58	133	8.58	144	10.28	558

As regards the distribution of hedges, Table 4 shows that the discussion section consisted of the highest frequency of hedges i.e. 10.28 PTW, followed by the results (with 8.58 PTW), introduction (6.73 PTW) whereas the methods section received the least quantity of hedges (i.e. 2.58 PTW). This indicates that L2 writers tend to be more cautious as they discuss the results of findings. This is corroborative of Yagız and Demir (2014) who found that American and Turkish writers used more hedges in the discussion and conclusion than RAs introduction.

b. Boosters

The findings indicate that writers tend to avoid marking conviction. As seen in Table 5, boosters only accounted for 0.88 PTW and thus boosters seem to be highly underrepresented in the corpus of this study. These findings do not seem to concur with previous research findings on interactional MD strategies in research articles. While this study shows a very low frequency of boosters, Lee and Deakin (2016) found that Chinese ESL undergraduate students' used of interactional MD strategies accounted for 4.86 PTW. Hyland (1998) study of metadiscourse in RAs shows that boosters are as frequent as 3.9 PTW. Likewise, Similarly, Hyland (2004) revealed that the use of boosters by L2 writers accounted for 3.95 PTW. The low frequency of boosters in the present study could probably be attributed to lack of familiarity with the importance of balancing caution with certainty in academic writing. Compared to hedges, the representation of boosters is

scarce. Although the use of hedges may be essential to show the writer's caution, the use of boosters is also important to mark the writer's conviction. Balancing the use of these features may contribute to ethos (Hyland, 2005) i.e. the credibility writers gain from their peers. Successful L2 writers tend to balance caution and certainty more effectively using both hedges and boosters (Lee & Deakin 2016).

As for the distribution of boosters, it was revealed that the discussion section received the highest instances followed by the results (0.97 PTW), the introduction (0.80 PTW) and the least frequent boosters occurred in the methods section (0.48 PTW). The high frequency of boosters in RAs discussion suggests that Arab L2 writers mark their certainty as they discuss findings because they might contend that their findings are supported by data (see examples 5-6). Table 5 overviews the use of boosters across RAs.

5. The current results also *showed* evidence that blogging would trigger an increase in supporting skills for learning to manifest such as motivation, commitment and planning and organizational abilities.

6. The findings *showed* that experimental participants outperformed the control participants with 18.9 mean score variance.

As regards boosters' sub-categories, three categories were detected namely emphatics, attributors and amplifying adverbs respectively (0.67, 0.47, 0.24 PTW). Table 5 shows that the most frequently used

sub-category of boosters is ‘amplifying adverbs’ whereas the least frequent is ‘emphatic adjectives’. Although ‘amplifying adverbs’ were the most frequent in the corpus, they were generally infrequent as they only accounted for 0.71 PTW. Like Lee and Deakin (2016), this study shows that there is a low proportion of amplifying adverbs such as clearly, definitely evidently. This could be attributed to the fact that L2 writers tend to have limited linguistic repertoire of expressions which mark conviction (Hyland & Milton, 1997).

c. Attitude Markers

The findings indicate that Arab L2 writers tend to use more attitude expressions compared to other interactional MD strategies. It was found that ‘attitude markers’ is the second highly frequent category of the interactional MD used in the corpus (i.e. 1.76 PTW). Although ‘attitude markers’ appeared to be highly frequent category following hedges, its occurrence in comparison to the overall

instances of interactional MD in the corpus was relatively underrepresented. In addition, only two sub-categories detected to express writers’ attitude, namely attitude adverbs and attitude adjectives and only one single instance of attitude verbs was detected. Curiously, the majority of attitude markers were realized by attitude adjectives (see Table 6).

Compared to similar research, there seems to be slight differences regarding the scarcity of attitude markers. Lee and Deakin (2016) report that the use of attitude marker by Chinese ESL learners account for 3.19 PTW. However, Hyland (2005) finds that attitude markers are used extensively in applied linguistic research articles; their frequency comes the second highly frequent in the corpus he analyzed (i.e. 5.3 PTW). The limited use of attitude markers by Arab L2 applied linguistics writers suggests that they either tend to avoid expressing their attitude in academic writing or perhaps they lack the awareness of developing attitude that contribute to persuasion in discourse.

Table 5
Boosters sub-types and their distribution across RAs

Boosters	Introduction		Methods		Results		Discussion		Total
	Freq.	PTW	Freq.	PTW	Freq.	PTW	Freq.	PTW	
Amp Adv.	4	0.11	3	0.29	7	0.45	10	0.71	24
Emphatic Adj.	5	0.13	0	0.00	1	0.06	1	0.07	7
Emphatic v	6	0.16	0	0.00	6	0.39	1	0.07	13
Emphatics	5	0.13	0	0.00	0	0.00	3	0.21	8
Emphatic modals	10	0.27	2	0.19	1	0.06	3	0.21	16
Total	30	0.80	5	0.48	15	0.97	18	1.29	68

Table 6
Attitude markers sub-types and their distribution across RAs

Attitude markers	Introduction		Methods		Results		Discussion		Total
	Freq.	PTW	Freq.	PTW	Freq.	PTW	Freq.	PTW	
Attitude. Adv.	11	0.29	3	0.29	17	1.10	8	0.57	39
Attitude. Adj.	50	1.33	7	0.67	21	1.35	19	1.36	97
Attitude. V.	0	0.00	0	0.00	0	0.00	1	0.07	1
Total	61	1.62	10	0.95	38	2.45	28	2.00	137

Like the other interactional MD strategies above, the distribution of attitude markers seems to vary across the different rhetorical sections (see Table 6). The results section received the highest occurrence of attitude markers (2.45 PTW) followed by the discussion (with 2.00 PTW), the introduction (1.62 PTW) whereas the least frequency of attitude markers occurred in the methods section (i.e. 0.95 PTW).

d. Engagement Markers

The findings indicate that Arab L2 academic writing is generally informational and less interactive. Given the lack of engagement markers, the writers tend to focus more on the content paying little attention to the presence of audience. As stated above, ‘engagement markers’ is the second least frequently used category in the corpus (i.e. only 0.63 PTW). This frequency may be considered extremely low compared to previous research. Lee and Deakin (2016), for instance, reported that engagement markers in Chinese ESL writing accounted for 5.05 PTW compared to 5.38 PTW in American L1 writing.

As regards the sub-categories of engagement features, we can observe that the only engagement markers used in the data were inclusive pronouns whereas other engagement markers such as obligation modals, directives and reader address were considerably scarce (see Table 7).

The scarcity of engagement markers might indicate a lack of familiarity with the persuasive role of these features on the part of Arab L2 writers. This most probably suggests that little attention is given to the role of engagement markers in academic writing courses in the Arabic context. These findings quite agree with Swales (1990), who found that the use of engagement markers in dissertations by non-native writers is quite less frequent than those produced by native writers. Thus, it is essential to raise the awareness of non-native writers in general and Arab L2 writers in particular about the role of engagement markers in accomplishing persuasive appeals in academic writing.

As far as the distribution of engagement features is concerned, it can be interestingly

Table 7
Engagement markers sub-types and their distribution across RAs

Engagement markers	Introduction		Methods		Results		Discussion		Total
	Freq.	PTW	Freq.	PTW	Freq.	PTW	Freq.	PTW	
Obligation Modals	0	0.00	0	0.00	0	0.00	0	0.00	0
Directives	6	0.16	1	0.10	1	0.06	1	0.07	9
Reader pronouns	29	0.77	0	0.00	4	0.26	7	0.50	40
Total	35	0.93	1	0.10	5	0.32	8	0.57	49

noticed that the highest frequency of engagement markers appears in the introduction section followed by discussion and the results sections whereas the lowest is exhibited in the methods section. This suggests that Arab L2 writers attempt to engage readers as they commence writing. The most prominent use of engagement features is exhibited by the use of the inclusive pronoun ‘we’ which is frequent to some extent in the introduction but infrequent in the other sections.

7. As EFL educators, *we* are not always aware of the significance of communication strategies that involve modalities of gesture and non-verbal body movements.

8. Reading is an everyday activity that *we* often do either consciously or unconsciously through the decoding of messages that surround us in different forms.

e. Self-mentions

Self-mentions are found to be the

least frequent category in the corpus. This is mostly expected since L2 writers, generally, tend to avoid marking self-reference (Hyland, 2005). The normalized frequency of self-mentions only accounted for 0.50 PTW. Although the use of self-mentions should not be overly employed, it seems highly rare in our corpus. Table 8 shows the sub-categories of self-mentions in the corpus. It can be seen that the most frequent self-mention is ‘the researcher’ whereas the first person singular is the least frequent. This indicates that writers tend to avoid using person markers as much as possible.

The limited deployment of person markers is possibly attributed to the misconception that academic writing is impersonal and faceless (Hyland, 2005). While such an assumption has been abandoned, many non-native speakers still avoid using self-mentions as they might believe that the use of personalization is not recommended in academic genre. By the same token, the use of these markers,

Table 8

Self-mentions sub-types and their distribution across RAs

Self-mentions	Introduction		Methods		Results		Discussion		Total
	Freq.	PTW	Freq.	PTW	Freq.	PTW	Freq.	PTW	
First person Sing	0	0.00	0	0.00	0	0.00	4	0.29	4
First person plural	5	0.13	2	0.19	8	0.52	4	0.29	19
The researcher	5	0.13	9	0.86	1	0.06	1	0.07	16
Total	10	0.27	11	1.05	9	0.58	9	0.64	39

particularly the first person, is the strongest means of self-representation (Ivanic, 1998 cited in Hyland, 2005).

As regards the distribution of self-mentions, we can, interestingly, note that the methods section represents the highest frequency of self-mentions (1.05 PTW) though this section received the lowest occurrence of the other interactional MD resources. This indicates that Arab L2 writers tend to make self-reference only as they describe procedures of analysis; however, they generally avoid marking self-representation in other sections. They mostly avoid the use of person pronouns; however, they at times refer to themselves using the self-mention ‘the researcher’ (see examples 9-10). The second highest occurrence of self-mentions are represented in the discussion section (0.64 PTW) followed by the results section (0.58 PTW) whereas the lowest frequency of person markers is found in the introduction (only 0.27 PTW).

9. Comparing data was essential in that it helped *the researcher* to determine which group of students performed well in the test.

10. *The researcher* also provided a short explanation about the questionnaires, the purpose of the study and instructions on how to respond to the questionnaires.

CONCLUSION

This study is set to find out the extent to which Arab L2 writers deploy interactional MD strategies in RAs to express their stance and engage readers in order to gain credibility from their peers. The findings of the study highlight some important issues about the use of interactional MD by Arab L2 writers. First, the findings indicate that Arab L2 writers tend to introduce argument like facts i.e. they express assertion and avoid expressing their stance in L2 academic writing. They tend to focus more on the content and pay little attention to marking

their stance explicitly. Second, they generally avoid the use of self-mentions and engagement markers to a great extent.

Before concluding, it is important to point out that the study has some limitations in terms of the corpus analyzed, the types of MD investigated and so forth. The findings might be taken with caution since the study was only carried out on 20 research articles. Therefore, future research may be conducted on a larger corpus to support or challenge the findings of this study. Another limitation is that the study was only conducted on a group of Arab L2 writers. Therefore, it would be much useful if another study is conducted to compare the use of interactional MD strategies by Arab and native English writers.

To conclude, the study has useful implications for contrastive rhetoric as well as L2 writing instruction. As far as contrastive rhetoric is concerned, the study contributes to our understanding the way in which Arab L2 writers express their stance and voice in RAs genre. It also contributes to writing pedagogy as it might raise Arab L2 writers' awareness the persuasive role of interactional MD strategies in academic writing. Overall, the findings could be utilized for the teaching of academic writing for future Arab L2 writers. Thus, university writing instructors need to reconsider the teaching approaches to English writing, and incorporate interactional MD strategies in L2 writing syllabus to enable L2 writers to develop appropriate stance and voice in academic writing (Ho & Li, 2018; Hyland & Milton, 1997).

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Persuasive Linguistic Elements in NYT and NST Editorials: Discoursal Pragmatic Interpretive Study

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ABSTRACT

In positioning the stance of the editorials that play a pivotal role in articulating the official position of the newspaper, the editor needs to have the craft of writing in a credible manner. It is important then that persuasive linguistic elements such as hedges and boosters are utilized in the editorials. Hence, this study aims to adopt a content analysis to investigate the use of hedges and boosters in 240 randomized editorials of *The New York Times* (NYT: n=120) and *New Straits Times* (NST: n=120). The results reveal that generally editors use more hedges than boosters. Moreover, interestingly, it was found that NYT editorials tend to use more boosters while the NST editorials exhibit a tendency to hedge more. One possible reason could be the political climate of the time. America being the epitome of

democracy provides freedom of speech and this is reflected in the ownerships of newspapers. Unlike Malaysia, owners of NYT newspapers are public individuals and not the government. Therefore, writers of NYT are bold enough to articulate their views without fear or favor. NST editors, in contrast, have to be mindful of what they write as the newspapers are owned by the government of the day.

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INTRODUCTION

Editorials due to their goal of influencing a wide readership through a plausible stance are categorized among persuasive and argumentative texts (Van Dijk, 1992). It is thus necessary for editorials to be constructed by considering the expectations of audience in the argumentation from a functional and not just a structural perspective. The concept of metadiscourse provides relevant categories in this regard. Hedges and boosters are two crucial interactional metadiscourse features for writers to clarify their epistemic stance and position related to the writer–reader interaction. Hyland (2005) posited that hedges provided a situation for writers to avoid complete commitment to a proposition. In other words, by presenting information as an opinion rather than a fact, writers embraced a stance that was subjective and open to negotiation. Unlike hedges, boosters clarify the writers' certainty of what they express and show involvement with the content and solidarity with their readers. To put it another way, boosters increase the force of the statement (Jalilifar & Seidian, 2016) and help the writers who have various positions in argumentative writing to narrow this diversity and confront choices by expressing their ideas with certainty and confidence (Hyland, 2005).

Therefore, hedges and boosters are linguistic resources that writers use to persuade their readers in believing the credibility of information and opinion conveyed. Hedges represent the unequivocal truth of writer's views and words which increase the credibility of writer due to

his/her integrity and honesty. It seems that the key to an effectively persuasive text is the skillful combination of weakening expressions (i.e. hedges) and strengthening ones (i.e. boosters) with the goal of producing a discourse that is neither too assertive nor too vague (Dafouz, 2008). These features affect the judgment of readers of the writer's character as they reflect how professionally the writer makes a balance between caution and confidence. For instance, a writer's claims in a text without hedges would seem more concise but more aggressive (Williams, 1981). Therefore, exploring the use of hedges and boosters in the editorial to provide a better insight into how these essential features are used and how they influence the readers, seems essential in the field of linguistic explorations and teaching persuasive genre and editorial in particular (ESP).

Literature Review

Surveying the literature on editorial genre which attracts a very wide readership reveals that editorials have not been given enough attention in applied linguistics studies. The limited number of existent studies have either focused on all the metadiscourse markers, or they have been done only quantitatively without in depth analysis of their functions. For instance, Khabbazi-Oskouei (2011) investigated all *interactional metadiscourse* markers in British and Persian news magazines. The results indicated that, in general, Iranian editors seemed to make wide use of 'certainty markers' while the British editors

seemed to favor the use of ‘uncertainty markers’.

In the same vein, Kuhi and Mojood (2014) attempted to find out the effect of cultural factors and generic convention of editorials in using metadiscourse markers in Persian and English newspapers. The findings revealed that *hedges* in English corpus were followed by *boosters*, while *Boosters* occurred more than *hedges* in Persian data. However, this study did not consider the use of metadiscourse markers qualitatively; therefore, it raises the need to seek the use of *hedges* and *boosters* qualitatively in the context. Another comparative study by Yeganeh et al., (2015) revealed the preference of boosters to hedges in both American and Persian newspaper articles.

In addition, Fu and Hyland (2014) analyzed the use of all the *interactional metadiscourse* markers in popular science articles and opinion texts. The findings revealed that hedges were more frequent than boosters in both genres. Furthermore, it was found that *hedges* and *boosters* were more frequent in opinion texts than in popular science texts due to their communicative purposes. Although Fu and Hyland (2014) had done a qualitative analysis, the classification done for hedges is limited to *verbs*, *adverbs* and *modals*. Moreover, it has not prepared a clear classification for categories of boosters and again boosters seem to be a neglected persuasive strategy. Hence, it raises the need for a combination of qualitative and quantitative analysis of both *hedges* and *boosters* specifically.

So far, only Tahririan and Shahzamani’s study (2009) focused on the use of *hedges* in editorials of English and Persian newspapers. Based on Varttala’s (2001) model, their findings revealed that English editorials were more heavily *hedged* than Persian ones. Therefore, to fill the research gap, this study investigated not only the use of hedges but also the use of boosters in both the *NYT* and *NST* editorials. Additionally, their functions and forms are compared between the two types of editorials. To realise these objectives, the following research questions guided the study:

1. What are the patterns of frequencies of hedges and boosters in the editorials of the *NYT* and *NST*?
2. What are the functions and linguistic realizations of hedges and boosters found in *NYT* and *NST* newspaper editorials?

METHODOLOGY

Research Design

The current study was designed as a non-experimental, descriptive research where quantitative analysis was used to investigate the patterns of occurrences of hedges and boosters in the *NYT* and *NST* editorials. Additionally, a content analysis was carried out to identify the functions and forms of hedges and boosters in the two types of editorials.

Data

To support the research objectives, 240 editorials were selected from *The New York*

Times (NYT) and *New Straits Times (NST)* based on an online number generator which randomly selected the data from the *NYT* (i.e. www.nytimes.com) and *NST* (i.e., www.nst.com.my) websites. Both, the *NYT* and *NST* cover a wide range of issues that are of public interest besides being among the largest and oldest newspapers in the US and in Malaysia. *The New York Times* believes in objective presentation of news and attempts to maintain ethics of journalistic writing (The New York Times Company, 2008). In contrast, the *NST* is considered a right-wing, pro-government newspaper (Pang, 2006).

A check on the availability of editorial in the newspapers revealed that the *NYT* has three to four daily editorials, while the *NST* publishes an editorial daily. Hence, in the *NYT* the first editorial on each day was selected. Additionally, to avoid the

possibility of changes in the style of writing of the editorial genre diachronically, only editorials published in 2013 were collected (Gillaerts & van de Velde, 2010).

Analytical Framework

In order to have a reliable discourse analysis, an adapted framework to the data of the current study was developed based on the previous analytic frameworks (Crismore et al., 1993; Dahl, 2004; Hyland, 2005; Khabbazi-Oskouei, 2011; Vande Kopple, 1985). To guarantee the reliability of analysis 20% of the data was analyzed independently by an inter-rater and in case of any discrepancies they came to consensus. A pilot study was carried out to evaluate the feasibility of the framework; the outcome of which was a composite framework as shown below (Table 1 & Table 2).

Table 1

Framework of hedges in editorials

Function	Example(s) of forms
<p>Modulating impact of utterances</p> <p><i>Determining accuracy of the presented information or claim</i></p>	<p>Approximators</p> <p>“Rarely”, “almost”, “nearly”</p>
<p>Withdrawing epistemic commitment</p> <p><i>decreasing the writer’s commitment to the actions and avoiding acceptance of the responsibility for what is written</i></p>	<p>i) Epistemic markers</p> <p>“appears”, “seem”, “assume”, “indicate”, “possibility”, “possible”, “seemingly”</p> <p>ii) Modal auxiliary</p> <p>“could”, “may”, “might”, “would”, “should”</p> <p>iii) Phrases indicating uncertainty</p> <p>“it is unclear”, “with no certainty”</p>
<p>Subject avoiding</p> <p><i>Not mentioning the subject or agent and hiding the person in charge for the action</i></p>	<p>i) Passive structure</p> <p>“was indicated”, “could be sentenced”</p> <p>ii) Impersonal pronoun</p> <p>“it”, “one”</p> <p>iii) Clausal subject</p> <p>“It is hardly surprising that...”</p>

Table 1 (Continued)

Function	Example(s) of forms
<p>Seeking solidarity</p> <p>The editor puts himself/herself at the same level or making them think of themselves but implicitly engage them to be in line with his point of view</p>	<p>i) Rhetoric question</p> <p>“Is there then not a need to discipline those responsible for sloppiness in carrying out their duty; are not escaped criminals a threat to public safety?”</p>
<p>Expressing counter-expectation</p> <p>showing alternatives or exchange for solidarity and conflict</p>	<p>Concession linking words</p> <p>“But”, “although”, “though”, “despite”</p> <p><i>“The bureau cannot undo the past, but strong rules could at least help to ensure that the past is not repeated”</i></p>
<p>Expressing hypothetical situation</p> <p><i>Expressing the conditions under which an event may or may not happen</i></p>	<p>“If”, “Unless”</p> <p><i>“If the African Union force, and especially Kenyan and Uganda troops, left Sumalia any time soon, the gains could all be lost”</i></p>

Table 2

Framework of boosters in editorials

Function	Example(s) of forms
<p>Enhancing epistemic commitment</p> <p><i>Emphasizing the truth or certainty of what is written and accepting the responsibility for what is written</i></p>	<p>i) Epistemic markers</p> <p><i>“obvious”, “strongly”, “of course”; Emphatic “do”/“does”</i></p> <p>ii) Modal auxiliary</p> <p><i>“ must”</i></p> <p>iii) Phrases indicating certainty</p> <p><i>“There is no doubt”, “it is clear”</i></p>
<p>Providing evidence and strengthening credibility</p> <p><i>referring to authority’s or some scientific researchers’ statement to show the credibility and reliability of its statements</i></p>	<p>Attribution</p> <p><i>“According to global Muslim travel consultancy Crescent rating’s Halal-Friendly Travel Ranking”.</i></p>
<p>Seeking solidarity</p> <p><i>referring to the hearer’s knowledge, or assumed shared background information to provide a solidarity with the reader and give strength to its statement</i></p>	<p>Clauses Seeking Solidarity</p> <p><i>“Like many people, we had questions...”</i></p>

RESULTS & DISCUSSION

The Use of Hedges and Boosters in the *NYT* and *NST* Editorials

The overall use of hedges and boosters in the *NYT* and *NST* editorials is demonstrated in Table 3.

Comparing the editorials of the *NYT* and *NST* regarding the use of hedges revealed that the number of hedges in the *NYT* editorials (i.e., 20.23 ptw) was less frequent than their Malaysian counterpart, with the *NST* having a frequency count of 20.49 ptw. On the other hand, boosters in the *NYT* (12.46 ptw) were more frequently used than in the *NST* (11.28 ptw). Despite this difference between the *NYT* and *NST* regarding the use of hedges and boosters,

a similarity between these two newspapers was found as they both used more hedges than boosters. This finding agrees with that of Kuhl and Mojood (2014), Khabbazi-Oskouei's (2011) study. This could possibly be attributed to the convention of the English editorial genre to be more tentative in expressing their ideas and not to express their authority explicitly (Kuhl & Mojood, 2014).

The Distribution of Linguistic Expressions of Hedges in the *NYT* and *NST* Editorials

The findings of this study revealed 11 types of linguistic realizations of hedges in both the *NYT* and *NST* editorials (Table 4).

Table 3

The overall frequency of the use of hedges and boosters in the NYT and NST editorials

<i>NYT</i> (n=60005 words)	Number of hedges/boosters <i>NYT</i>	Freq. (ptw)	<i>NST</i> (n=63334 words)	Number of hedges/boosters <i>NST</i>	Freq. (ptw)
Hedges	1214	20.23	Hedges	1298	20.49
Boosters	748	12.46	Boosters	715	11.28
Total	1962	32.69	Total	2013	31.77

Table 4

Frequency of various linguistic realizations of hedges in the NYT and NST editorials

Linguistic categories of hedges N=1426	<i>NST</i> = 63334 words			Linguistic categories of hedges N=1245	<i>NYT</i> = 60005 words		
	Raw number	Freq. (ptw)	Percent		Raw number	Freq. (ptw)	Percent
Passive structure	315	4.97	22.09	Modal auxiliary	429	7.14	34.45

Table 4 (Continued)

<i>NST</i> = 63334 words				<i>NYT</i> = 60005 words			
Linguistic categories of hedges N=1426	Raw number	Freq. (ptw)	Percent	Linguistic categories of hedges N=1245	Raw number	Freq. (ptw)	Percent
Modal auxiliary	269	4.27	18.86	Passive structure	209	5.08	16.78
Approximators	218	3.44	15.28	Approximators	184	3.06	14.78
Epistemic modality markers	147	2.32	10.30	Hypothetical expression	134	2.23	10.76
Hypothetical expression	136	2.14	9.53	Epistemic modality markers	96	1.59	7.72
Personal pronoun	128	2.02	8.97	Expressing counter expectation	93	1.54	7.46
Expressing counter expectation	88	1.38	6.17	Personal pronoun	31	0.51	2.49
Rhetoric question	87	1.37	6.10	Rhetoric question	28	0.46	2.25
Impersonal pronoun	17	0.26	1.19	Clausal subject	17	0.28	1.36
Clausal subject	16	0.25	1.12	phrases indicating uncertainty	14	0.23	1.12
Phrases indicating uncertainty	5	0.07	0.35	Impersonal pronoun	10	0.16	0.80
Total	1426	22.51	100	Total	1245	20.74	100

As demonstrated in Table 4, *Modal auxiliary*, *Passive structure* and *Approximators* are the most frequent structures of realizing hedges in the editorials of both the *NYT* and *NST*. On the

other hand, as shown in Table 4, *Impersonal pronoun* (*NYT*=0.16, *NST*=0.26 ptw), *Clausal subject* (*NYT*=0.28, *NST*=0.25 ptw) and *Phrases indicating uncertainty* (*NYT*=0.23 and *NST*=0.07 ptw) did not have

a significant frequency (less than 1 ptw) and were the least frequent linguistic categories. The function of each of these linguistic categories is described in the next section.

The Function of Hedges and Their Linguistic Categories in the *NYT* and *NST* Editorials

The functions and linguistic categories of hedges are discussed below.

Modulating the Impact of Utterances.

Modulation through the use of hedges realizes when it introduces fuzziness into the propositional content by expressing a lower accuracy of the presented information (Jalilifar & Alavinia, 2012). This function of hedges in the editorials occurred in the use of modifiers like approximators which indicate their uncertainty about the information and avoid specifics (Fu & Hyland, 2014) as there is no verification of the exact number involved.

(1) *Myanmar's democratic aspirations can never be fully realized if Muslims, who make up **about** 5 percent of the population, continue to be attacked and marginalized by Buddhists, the majority of the population. (NYT, May 30, 2013).*

(2) ***NEARLY** a week after the Kuala Besut by-election, the Election Commission must have a huge sigh of relief that there so far appears to be no complaints about the quality of the indelible ink it used during this most recent election. (NST, July 30, 2013).*

Withdrawing Epistemic Commitment.

One of the main functions of hedges is to decrease the writer's commitment to the actions and to avoid the acceptance of responsibility for what is written. This function of hedges is realized in the use of modal auxiliary that expresses the writer's uncertainty toward the truth of the proposition. Modal auxiliaries sometimes have epistemic function that shows tentativeness of the writer, while in other cases, they have a non-epistemic function with a deontic meaning to convey permission and obligation (Lyons, 1977). What is included in this study as hedges is epistemic modal verbs that express the writer's judgment and tentativeness about the possibility of the proposition (Hyland, 1998).

The analysis revealed that "*would*" is the most dominant *modal auxiliary* in both the *NYT* and *NST*. According to Biber et al. (2002), the logical meaning of "*would*" mostly expresses the likelihood or probability of occurrence or happening of a particular action in the future time. Besides, Lock (1996) believed that "*would*" was at the high (certainly) level of likelihood, while "*could*", "*may*" and "*might*" were at the low (possibly) level. Comparing the *NYT* and *NST* regarding the use of "*would*" reveals that it is more frequent in the *NYT* (70.86%) than in *NST* (53.53%). Hence, it is possible that the *NYT* editorials have the tendency to voice their stances with a higher degree of likelihood and certainty than *NST* editorials.

(3) *Letting the Treasury run out of borrowing authority **would** mean a default*

on the nation's credit, a catastrophic prospect for holders of government bonds around the world. (NYT, January 2, 2013).

(4) And yet, while most parents would take care to ensure that their children are not run down by cars on the road to school, many fail to ensure that when these children become adults, they are able to negotiate the financial highway safely. (NST, September 19, 2013).

In addition to modal auxiliaries, epistemic markers also withdraw the commitment and qualify the truth value of a propositional content (Catenaccio et al., 2011). Using epistemic modality, the editor conveys his/her state of knowledge and belief concerning the information. The findings of this study revealed that in both the *NYT* (51.04%) and *NST* (46.25%) *epistemic verbs* are the most dominant forms of realization of epistemic markers. The analysis of data revealed the existence of epistemic adverbs like “*probably*” (42.42%) and “*perhaps*” (24.24%) and epistemic adjectives such as “*likely*” (*NYT*=48.27%, *NST*=25.8%) and “*possible*” (*NYT*=37.93%, *NST*=54.83%) as well. Among all the epistemic markers, epistemic nouns (e.g. *possibility*, *likelihood*, *probability*, and *uncertainty*) were the least frequent features in both the *NYT* (6.25%) and *NST* (9.52%) editorials.

Epistemic verbs are those verbs that reduce assertiveness by expressing the writer's speculation (Hyland, 1998; Varttala, 2001). The analysis of the data in this study shows that “*seem*” (*NYT*=28.57%,

NST=39.7%), in line with Fu and Hyland's (2014) research is the most dominant *Epistemic verb* in both the *NYT* and *NST*.

(5) While either side could undermine the November interim agreement, and with it the best chance in 30 years for a genuine thaw in Iranian-American relations, the more serious threat seems to be on the American side. (NYT, December 9, 2014).

(6) For another, in the true vein of the activist, the 16-year-old appears to care less about whether people supported or liked her; what was important was that they supported the cause for education. (NST, October 13, 2013).

Subject Avoiding. Subject avoiding is a facilitator for the editor to make claims without the risk of being rejected or threaten the face of anyone. Among different linguistic realizations of subject avoiding, passive structure was one of the most dominant categories in both the *NYT* (5.08 ptw) and *NST* (4.97 ptw) editorials.

According to Buitkieniè (2008), newspaper editors avoid taking responsibility for what they claim and attempt to be objective. Hiding agency in relation to the object of criticism (Blas-Arroyo, 2003) is what happens when one wants to exercise a degree of mitigation. This is possible by the use of passive structure and not mentioning exact information to save the face of the readers and the government members as the criticism maybe pointed at them.

(7) *Now that the C.I.A. payments have been exposed, it will be harder to make that argument. (NYT, April 30, 2013).*

(8) *For, in some places, the land laws are such that people stakeout more than they can handle. To hang on to it, they are forced to resort to open burning in the dry season. (NST, July 17, 2013).*

Besides to the passive structure, in both the *NYT* and *NST*, impersonal pronoun (*NYT*=0.16, *NST*=0.26 ptw) and clausal subject (*NYT*=0.28, *NST*=0.25 ptw) were used to avoid the agent which did not have significant frequency (less than 1 ptw). Therefore, this study does not describe them in detail.

Seeking Solidarity. Another function of hedges is to provide solidarity with the reader in a way that it assists the editor to hide himself/herself behind them in order not to be questioned or criticized for his/her stance. *Rhetoric question* is a linguistic realization that performs the function of seeking solidarity to achieve two communicative purposes in the editorial genre: (i) engaging with the reader and conveying the editor's stance inductively, and (ii) decreasing the possibility of criticism.

Engaging with the reader is the dominant communicative purpose of rhetoric questions in both the *NYT* (93.54%) and *NST* (73.56%). In other words, rhetoric questions provide writers and readers with a mutual context and assist writers to use assumed beliefs particular to their

specific discourse community. Using this strategy, the editor considers the reader as an intelligent participant who is interested in the same area, and by employing question and good sense, the reader follows the writer's implicit response to it (Fu & Hyland, 2014). By reducing the pressure of the argument and making readers themselves evaluate the proposition, the editor intends to provide the text with a sense of reasonableness and possibly more effectively maneuver readers into agreement (Fu & Hyland, 2014).

(9) *The proposal could have unfortunate unintended consequences. Would a needy student be punished who, for personal or travel reasons, has no choice but to attend a college that is low in the government rankings? (NYT, August 22, 2013).*

(10) *But does it not stand to reason that with peace and prosperity, violence will be rejected? (NST, September 30, 2013).*

On the other hand, *rhetoric questions* provide editors with an invaluable strategy to interact with their readers effectively along with mitigating the possibility of criticism (Hyland, 1996). This criticism is due to the writer's stance regarding the issue and evaluation of behavior or actions of residents. This function of rhetoric questions is more frequent in the *NST* (26.43%) than in the *NYT* (6.45%) which is possibly because the *NST* due to its politeness or close ties with the government attempts to decrease the pressure of criticism on the readers.

(11) *Will Congress finally raise the federal minimum wage this year? It would be the least that lawmakers could do. (NYT, January 4, 2013).*

Expressing Counter-expectation.

According to Jalilifar and Alavinia (2012), expressing an idea which countered with the previous stance occurs as a counter-expectation clause as it unexpectedly expresses an idea that is opposite to the main part of the sentence.

The analysis revealed that in both the *NYT* (92.39%) and *NST* (77.27%), “*but*” is the most dominant counter expectation feature. With the use of “*but*”, “*although*”, “*despite*”, “*in spite of*”, etc., the writer tends to mitigate the pressure on the addresser due to the rejection of a particular idea or action. It could be considered as a shift from conflict to solidarity of ideas.

(12) *These differences were huge, but they were ignorable, because it was only an electoral pact to get them through the elections against Barisan Nasional. (NST, April 25, 2013).*

(13) *Although the severe recessions in Greece and elsewhere seem to be bottoming out and deficit projections are starting to improve, unemployment rates of more than 25 percent in Greece and Spain are disastrous. (NYT, September 23, 2013).*

Expressing Hypothetical Situation.

Hedges under this functional category assist the editor to express the conditions

under which an event may or may not happen (Martin & Rose, 2003). The editor attempts to decrease his/her commitment to the expressed idea by considering that the future happening of an event depends on accomplishment of a particular condition. This function is seen in the use of *hypothetical expressions* by the use of which editors state their stance with cautious and tentativeness.

(14) *If these promising results are confirmed next year, the N.I.M.H. and leading psychiatric organizations ought to consider ways to bring this cheap and highly effective sleep therapy into widespread clinical use. (NYT, November 23, 2013).*

(15) *If the government intends for the majority of hardworking citizens to have a fair chance at homeownership, it must put a cap on how many residential properties a person can own. (NST, August 29, 2013).*

The Distribution of Linguistic Expressions of Boosters in the *NYT* and *NST* Editorials.

Similar to hedges that have different functions and linguistic realizations described earlier, the frequency of the linguistic realizations of boosters varied between the *NYT* and *NST* editorials (Table 5).

As shown in Table 5, the *NYT* (12.46 ptw) exceeded *NST* (11.28 ptw) in employing boosters. It seemed that in contrast to *NST* editorials’ tentativeness in expressing their claims through hedges, the *NYT* editorials used a bold stance by the use of more boosters. In comparison with the *NST* editorials, the *NYT* editorials’ comparative

boldness of stance, showed the role that they adopted for themselves which is as an independent daily newspaper authorized to comment with full commitment and with little doubt. This finding is supported by Masroor and Ahmad (2017) who found out that *NST* in comparison with *NYT* was using fewer number of directives as persuasive elements. They discussed that it was a signal of tentativeness of the Malaysian newspaper due to the context and policy of the country and the newspaper.

As revealed in Table 5, there are varieties in the distribution of different

linguistic uses of boosters. Among different types of linguistic uses of boosters, in both the *NYT* and *NST* editorials, *Epistemic modality marker* (*NYT*=7.08, *NST*=6.82), *Modal auxiliary* (*NYT*=3.06, *NST*=3.52), and *Attribution* (*NYT*=1.94, *NST*=0.48) are the most frequent linguistic expressions of boosters found in the editorials. In contrast, *Clauses seeking solidarity* were the least frequent linguistic use of boosters in both the *NYT* and *NST* editorials. The following sections express the function and description of the use of different linguistic categories of boosters.

Table 5

Distribution of various subcategories of boosters in the NYT and NST editorials

Categories of Boosters	NYT			NST		
	Raw number	Freq. (ptw)	Percent	Raw number	Freq. (ptw)	Percent
Epistemic modality markers	425	7.08	56.81	432	6.82	60.41
Modal auxiliary	184	3.06	24.59	223	3.52	31.18
Attribution phrases indicating certainty	117	1.94	15.67	31	0.48	4.33
	20	0.33	2.67	21	0.33	2.93
Clauses seeking solidarity	2	0.03	0.26	8	0.12	1.11
Total	748	12.46	100	715	11.28	100

The Function of Boosters and Their Linguistic Categories in the *NYT* and *NST* Editorials

The function of each of the linguistic categories of boosters in examples from the *NYT* and *NST* editorials are described in the following sections.

Enhancing Epistemic Commitment.

Increasing the writer's commitment to the actions is seen in the use of epistemic markers that perform the function of enhancing epistemic commitment in two different ways that are expressing certainty and expressing emphasis which are explained in the following sections.

Epistemic markers expressing certainty. The findings revealed that 58.35% of all *epistemic markers* in the *NYT* and 48.37% in *NST* are *epistemic adjectives and adverbs* that are used to express the qualification of a proposition regarding certainty of a particular event's occurrence (Fetzer, 2008). It consequently increases the significance of the editor's claims and evaluation regarding the addressed issue.

The findings show that "clear" and "obvious" are the most dominant adjectives in the *NYT* (39.28% and 17.85%) and *NST* (56.25% and 37.5%). In addition, "especially" is similarly the most dominant adverb in both the *NYT* (5.9%) and *NST* (14.5%) editorials. These boosters allow writers to express conviction and assert a proposition with confidence, representing a strong claim about a state of affairs (Hyland, 1998). With the use of these

devices, the editor offers a strong support to the argument, strengthens his/her position, and leaves readers in no doubt as to his/her stance. Therefore, it plays an essential role in enhancing the impact of the editor on the reader's ideology and position regarding the issue as in the following examples.

(16) *Those earlier mergers are precisely [Adv.] the reason this consolidation is a problem. Fares and fees have increased across the industry and especially [Adv.] on routes where mergers reduced competition in the last five years. (NYT, August 13, 2013).*

(17) *It is entirely [Adv.] possible that some of the people that preventive detention laws would detain are the sort of people who would not give us the same chances that we would them, but that is what distinguishes them as the bad guys. (NST, August 6, 2013).*

Epistemic markers expressing emphasis. The analysis of data revealed that in both the *NYT* (41.64%) and *NST* (51.62%) the editors by the use of *epistemic markers* such as *only, just, even, never, emphatic do, always, and of course* attempt to intensify a particular part of information or a specific stance regarding the issue. However, "only" was the most dominant linguistic form in the *NYT* (31.82%) and *NST* (31.43%).

According to Jalilifar and Alavinia (2012), editors use these devices to reinforce or emphasize the speech act it introduces. This type of booster paves the way for the

writer to highlight specific parts of his/her statements in a way that the reader easily notices its importance.

(18) *A liberal arts college should not be penalized **simply** because a history degree doesn't lead to the same earnings as a computer science degree. (NYT, August 22, 2013).*

(19) *But this does not mean that the populace cannot institute a culture of transparency and accountability, by **always** asking questions, **always** insisting on clear honest answers and **never** giving an inch more than what has been earned. (NST, November 29, 2013).*

Moreover, enhancing epistemic commitment function was also realized in the use of *modal auxiliaries* like “*will*” and “*must*” that were used whenever the editor intended to predict an event in future with certainty of expected outcome (Hyland, 1998). The editor, with the use of “*must*” and “*will*”, shows a high and strong possibility of the occurrence of a particular event (Hu & Cao, 2011).

(20) *But, in so publicly rejecting Pas, Fernandez **must** surely have realised that DAP's road to Putrajaya **will** fail if voters take his advice. (NST, April 30, 2013).*

(21) *National regulators will continue to have some responsibilities, like ensuring consumer protection and policing money*

*laundering, but the E.C.B. **will** be in charge of overall safety and soundness, which should give depositors and investors more confidence in the banking system. (NYT, October 19, 2013).*

Besides the epistemic markers and modal auxiliaries, there are some phrases that do not follow a specific grammatical rule and generally have a booster function (e.g., “*It's increasingly clear*,” “*The fact is that*”, “*Without doubt*”) to enhance the epistemic commitment of the editor. However, due to their insignificant frequency, they have not been explained in more detail.

Providing Evidence and Strengthening Credibility.

In the case of newspaper genres, the chief trust of attributing ideas to sources appears to build a case for evidence, which strengthens the credibility of the arguments, and thus, the evaluation offered by the newspaper (Hulteng, 1973). *Attribution* as a linguistic realization of boosters is the presentation of the truth of a proposition by indicating or referring to the source as evidence for the writer's claim (Perrin, 2012). According to Pak (2010), attributed statements utilize this device of argumentation to convince readers with evidence and authority. *Attribution*, more than all the other linguistic uses of boosters, expresses conviction, commitment and certainty indirectly (Khabbazi-Oskouei, 2011). Findings of this study regarding the high frequency of *Attributions* in the native newspaper is in accordance with Khabbazi-

Oskouei's study (2011) that revealed British magazine editorials exceeded Iranian magazine editorials in the use of *Attribution*.

(22) *As Thomas Campbell, the chief executive and director of the Metropolitan Museum of Art in New York, said, public art must be "a permanent, rather than a liquid, community asset". (NYT, July 26, 2013).*

(23) *According to the prime minister, when that happens there is no doubting the willingness of the authorities to enforce existing laws. (NST, June 14, 2013).*

Seeking Solidarity. Writers typically plan to involve both supporters and opponents in the agreement with their position by using strategies that employ a degree of conventional intimacy. One way of creating this sense of solidarity is by using boosters to appeal to the reader as an intelligent co-player in a close-knit group (Hyland, 1998). According to Hyland (2005), boosters function as features that can also be seen as engaging readers and establishing rapport by marking involvement with the text.

The analysis of editorials revealed clauses by the use of which the editor seeks solidarity with the reader to booster his/her claims and stance. According to Holmes (1984), these lexical devices boost the force of the statement through explicit or implicit reference to the audience's knowledge, or assumed shared background information, e.g. "*naturally*", "*it goes without saying*". By including readers in this way, the writer

credits them with possessing both in-group understandings and the intelligence to make the same reasonable inferences. The argument is, thereby, strengthened by claiming solidarity with the community, and the mutual experiences needed to draw the same conclusions as the writer (Hyland, 1998).

(24) *The news that the Central Intelligence Agency has been spending lavishly in Afghanistan should come as no surprise. (NYT, April 30, 2013).*

(25) *NATURALLY it is difficult for many, and possibly the person himself, to believe that an elected senator of a country can be an undesirable and refused entry by the immigration authorities of an independent, sovereign nation like Malaysia. (NST, February 18, 2013).*

CONCLUSION

Overall, the findings of this study reveal that editorials in the *NYT* have slightly lower frequency of hedges, but higher frequency of boosters when compared to *NST* editorials. This generally shows the greater authorial certainty, commitment, and assertiveness of the *NYT* editorials. On the other hand, higher occurrence of hedges and lower occurrence of boosters in *NST* when compared with its American counterpart, demonstrates the tentative stance of the editors regarding the issues raised (Masroor & Ahmad, 2017). It also indicates the opposite style of persuasion of these two newspapers. The *NYT* editorials

were found to be more authoritative and confident in expressing their claims, as well as evaluation of the issues. On the other hand, the *NST* was considered as a newspaper that is more informative and less evaluative. According to Crismore et al. (1993), certainty is related to strength, assertiveness, and self-confidence; while hedging is related to weakness. Therefore, even when *NST* editorials intended to express their attitude toward certain issues, hedges were employed to avoid face threatening statements. In contrast, the *NYT* editorials attempted to show their authority as an independent newspaper with worldwide readership by using a higher number of boosters than their Malaysian counterpart.

Although the editors in the two languages might have different strategies in using hedges and boosters, possibly due to their cultural differences, they somewhat follow the same disciplinary culture and write within a conventional framework identified by the genre (Kuhi & Mojood, 2014). In agreement with other researchers (e.g., Golebiowski & Liddicoat, 2002; Taylor & Chen, 1991), culturally-based rhetorical conventions and styles of persuasion features could be considered as a possible reason for these observed differences between American (the *NYT*) and Malaysian (*NST*) newspapers. For instance, in Malaysia, perhaps the Islamic instructions and beliefs influence the social and cultural factors, as well as context models, which lead writers to indirectness, conservatism, and cautious style when expressing ideas, and attitudes

(Scollon & Scollon, 1995). Therefore, *NST* editorials, by using more hedges, attempted to take a cautious stance and to avoid face threatening expressions.

Additionally, according to Ansary and Babaii (2009), the rhetorical structure of editorial texts might be affected by the editorial policy of the newspaper, in which the editorials appeared. Therefore, there is a possibility that the reason for this indirectness of *NST* editorials is a part of the newspaper's policy to reduce the boldness of its claim to readers of diverse backgrounds. Moreover, the use of more hedges in *NST* editorials could probably indicate its expression of respect for the government and the structure of society in which there is a diverse racial mix. In this line, Keeble (2001) cited the importance of ethics in journalism. He indicated that a journalist must avoid derogatory remarks on skin color, and religion of any ethnicity. Therefore, in multi-racial Malaysia news related to ethnicity, skin color, and religion are very sensitive, so journalists have to use hedges to express their voice. In this way, the news written will be more acceptable to the various ethnic groups.

Furthermore, according to Hinkel (2002), native English speakers have a direct style of writing when providing justification and proof. Their education systems attempt to instill in their learner with a sense of individualism, self-confidence, and self-respect (Hyland, 2002). Therefore, the *NYT* editorials' boldness in their use of boosters also shows the clarity of their stance. Hence, this high level of stance clarity reflects

a specific sense of self-confidence in the editorials of the American newspaper. It could be related to their socio-cultural norms and conventions for interaction. It assists them to secure acceptability and credibility of their writing and to generate successful communication with their readers. This endeavor persuades the readers to think and act in a particular manner and for a specific purpose.

Limitations and Implications of the Study

The findings of the current study could be a catalyst to popularize the newspaper genre in general and the editorial subgenre in particular. It could familiarize the readers with the structure of editorials and pave the way for them to more easily understand editorials and in the process appreciate their value and importance. In addition, this study shows the possibility of analyzing editorials and motivates more researchers to look for its rhetoric structure, and different linguistic elements (e.g., hedges and boosters), which are effective in achieving its communicative purposes. Consequently, filling the gaps will bring about improvement and progress to the editorial genre. Moreover, the growth in the popularity of editorials might create careers in future for ambitious writers and turn editorial writing in to an industry (Fartousi, 2012).

Using genre knowledge assists writing teachers to look beyond the content, linguistic forms and processes of writing. Consequently, they can enable the learners to communicate with the readers through their

writing. This study indicates the advantages of using the editorial to help students write argumentative essays, as there are so many similarities in their lexis, structure and linguistic features such as modality, connectives for reasoning and involvement strategies (So, 2005). In light of the findings of the current study, ESP students may be able to write a kind of persuasive article that is properly organized, informative and persuasive to the audience. So, providing curriculum involving subcategories of hedges and boosters, as persuasive devices, could be useful for non-native speakers and writers to equip them with basic tools of stating various levels of commitment.

Due to limitations of time and distance constraints, it was not possible for the researcher to interview the editors of the American newspaper as the native English writers of editorials that could be considered as exporters of this genre to other countries. Therefore, conducting a study in which includes interviews with the native English editors. Moreover, the current study has only focused on the use of hedges and boosters in editorials. Hence, there is a need to compare the structure of editorials as well as their use of hedges and boosters with other newspaper sub-genres to find out whether it could be considered as an independent genre. It can also provide the readers with the possible similarities and differences of various newspapers sub-genres. Additionally, studying interactional metadiscourse devices in spoken news could also be an interesting area of investigation.

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Investigating Cross-Language Relations in the Phonological Awareness of Children's Early Reading

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ABSTRACT

This study investigated whether the cross-language relations of children's phonological awareness skills influenced their first- (L1: Chinese), second- (L2: English) and third-language (L3: Malay) early reading ability. A battery of tests was designed to measure children's phonological awareness and reading ability. Three tasks of phonological awareness and two tasks of reading were administered in Chinese, English and Malay languages. The tasks that assessed phonological awareness skills included deletion, blending and segmentation of sound, and two early reading tasks included word and sentence reading. One-hundred and fifty (150) Chinese-speaking children participated in this study. These participants were Year 1 students from six national Chinese primary schools in Malaysia. Partial Least Squares-Structural Equation Model (PLS-SEM) was used to analyse the data. Results revealed that there was no skill transfer from L1 to L2 and L3 due to orthography differences. Cross-language transfer was found in L3 phonological awareness which strongly predicted L1, L2 and L3 early reading ability.

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INTRODUCTION

The need for children to acquire two or more languages in the school context or in their daily communication is increasing. Reading is a fundamental skill to master a language, especially in the early stages. Phonological awareness has proved to be

the most powerful predictor of early reading (Adams et al., 1998; Anthony & Francis, 2005; Castles et al., 2011; Gillon, 2004; Litt, 2010; Lonigan et al., 2009). However, the studies which investigate the cross-language relations in the phonological awareness of children's early reading in Malaysia context still underexplored. The influence of the first language (L1) on children's reading performance in second language (L2) and third language (L3) still needs more attention from the researches.

Phonological awareness is an essential skill that underlies a child's ability to learn to read. It is referred to as the ability to manipulate the sound structure of spoken language regardless of meaning (Wagner & Torgesen, 1987). Phonological awareness skills are commonly measured by tasks of manipulating sounds in words such as counting, matching, deleting, blending, and segmenting sounds within words (Anthony & Francis, 2005). This ability to manipulate units of sound helps children make connections between sounds and letters in print (Wagner & Torgesen, 1987). It allows children to decode the phonological code represented by the symbols. This process is known as word decoding. Research carried out by Lonigan et al. (2009) indicated that children who had difficulty in the coding process were most likely to lack phonological awareness as they could not describe the smaller units of sound in words.

Cross-Language Transfer

When there is a relationship between two languages there is a tendency for the

languages to influence each other. These influences are known as "interference" and they are interdependent (Paradis & Genesee, 1996). Paradis and Genesee (1996) suggested that although phonological systems were different in other languages they did not develop separately. However, they were interdependent which brought in the force of "*transfer*", i.e. the more dominant element in one language would be transferred to the weaker one.

The transfer may occur in both directions from one language to the other or vice versa. It may facilitate or accelerate the acquisition of phonological skills in weaker languages, for example, the same phonetic sound in two languages. This is said to be the "positive transfer" effect (Goldstein & Bunta, 2012). However, interactions may also cause a negative transfer when the sound in one language does not have the same phonetic sound, which delays the phonological development in a second language. This is known as "negative transfer" (Goldstein & Bunta, 2012). The influence and interaction between languages is a common phenomenon in the reading development of bilingual or multilingual children (MacWhinney, 2012). Studies suggest that reading skills such as phonological awareness can be transferred across languages regardless of their orthographic whether alphabetical or non-alphabetical (Chen et al., 2010; Chow et al., 2005; Chung & Ho, 2010; Cummins, 1981; Goodrich et al., 2013; Lafrance & Gottardo, 2005; Li et al., 2010).

Cummins' Interdependence Hypothesis (2008) had explained how cross-language transfer occurred between languages. Cummins (2008) suggested that languages were interconnected and might influence one another. Children develop a common underlying proficiency in first and second language (L1 and L2, respectively) which is transferable across languages (Cummins, 1981). Common underlying proficiency involves general cognitive processing skills such as phonological awareness, working memory and rapid automatic naming. These cognitive skills underlie L1 and L2 reading processes (Goodrich et al., 2013). To enable these transfer processes, a minimum level of language proficiency is needed (Cummins, 1981). Depending on the characteristics of both languages, children may develop more advanced phonological awareness skills in the languages through cross-language transfer. The transfer may occur in any direction provided there is sufficient exposure to L2 either in school or environment, and motivation to learn L2.

Alternatively, there is the script-dependent hypothesis introduced by Cummins (1979), which suggests that the characteristics of different scripts may influence the acquisition of languages and cause different reading and writing problems. Different orthographic features and phonological systems demand different reading skills in different languages. It is possible to predict whether transfers occur between languages depending on the orthographic and phonological

characteristics of both languages (Chung & Ho, 2010).

Effects of Phonological and Orthographic Structure on Phonological Awareness

Phonological and orthographic structure influence the acquisition of second language reading (Perfetti et al., 1992; Ziegler & Goswami, 2005) and it may determine whether skills can be transferred across languages. The Chinese writing system differs substantially in both phonological and orthographic structure from the English and Malay, which are alphabetic writing systems. The acquisition of an alphabetic orthography plays an important role in the development of phonological awareness, particularly in the development of phonemic awareness (Anthony & Francis, 2005; Castles et al., 2011; Litt, 2010; Lonigan et al., 2009).

On the other hand, Chinese is relatively simple in phonological structure than Malay and English. The basic unit of the Chinese writing system is character. Unlike the alphabet system, Chinese scripts are not based on phonemes; they are based on syllabic-morpheme where Chinese characters are based on graphic units containing morphemes and syllables (McBride-Chang et al., 2008). A Chinese character can provide orthographic information (writing), syllables (mentions) and morphology (meaning) (Li et al., 2010). Syllable is a basic unit of pronunciation in Chinese and each syllable is divided into two parts namely onset-rime, for example

syllable / mei3 / divided into / m / (onset) and / ei3 / (rime). It is more consistent and reliable when larger grain size units, including syllables and rhymes, are utilised. As a result, Chinese favour larger grain size units (Chung & Ho, 2010; Ziegler & Goswami, 2005).

English and Malay consistent with strong letter-sound correspondence and units of phonemes are favoured. Balota et al. (2004) described the onset-rime structure in English syllables. A single syllable consists of onset and rime. The rime consists of a nucleus and a coda. The nucleus is represented by the vowel, the coda is represented by the final consonant and the onset is represented by the initial consonant. For example, the word “pat” / pæt / consists of three letters “p”, “a” and “t”, where “p” represents sound / p /, “a” sound / æ / and “t” / t /.

The Malay language consists of 26 letters and all alphabet names in Malay are similar to that of English. It has 34 graphemes which include 26 letters, five digraphs (gh, kh, ng, ny and sy) and three diphthongs (ai, au and oi). Most phonemes in Malay are also similar to phonemes in English (Awang, 2004). For example, “g” for “girl” and “h” for “house” are similar in Malay such as “g” for “guru” (teacher) and “h” for “hidung” (nose). Some of the phonemes are different in both languages. For example, the letter “c” which sounds like /ch/ and the letter “u” which sounds like /oo/ in Malay language. Syllables are salient units in Malay words, even though consistent with letter-sound correspondence.

It is because Malay words have distinct syllable structures (Haron, 2011).

Both English and Malay are Roman scripts, but both languages have different transparency relationships. According to Haron (2011), one of the key factors of the Malay language being an easy-to-learn language is due to its very easy phonological system. It is considered a transparent orthography because of the relationships between the phonemes that can be matched completely. It has a close relationship between letters and sounds like English, but it has a systematic phonological system of which one letter represents only one phoneme. English, on the other hand, is considered to have “deep” orthography because of its complex phonemes. The English phonological system is disordered and not symmetrical, and there is no phonemic. Each English letter may represent two, three or four phonemes. For example, the letter “a” and the letter “c” represent several different phonemes of sound in English. “a” in the words “apple”, “arm” and “caught” represent three different phonemes, and “c” in the words “cut”, “cent”, “place” and “chair” represent four different phonemes.

In the Malay language, the example of the letters “a” and “c” only represent a phoneme / a / and / c / in all word combinations except the letter “e” which represents two phonemes. Examples of the letter “e” are contained in words such as “*emak*” and “*enam*”, and the letter “é” pepet in words like “*elok*” and “*esok*”. Based on these different phonological systems it is

assumed the process of acquiring reading skills in English and Malay is different, and the effectiveness of an English-language teaching technique may not be used as a guide to teach early reading of Malay language (Haron, 2013). Though there are differences in graphic-phonemic relationships, early reading of children in both English and Malay languages is entirely dependent on phonological skills including phonological awareness and decoding to read words (Pasquarella et al., 2015). This study was conducted due to several unclarified issues, including whether first-language phonological awareness skills influence the development of second and third language early reading.

This study aimed to examine the relations between phonological awareness and early reading in the acquisition of Chinese, English, and Malay language. The study investigated the cross-language transfer of phonological skills in acquiring three different languages. This study presented two research questions: (a) Do phonological awareness skills predict children's early reading? (b) Do phonological awareness skills in L1 transfer to early reading in L2 and L3 or vice-versa? The study investigated whether the cross-language relations of phonological awareness skills influenced children's early reading ability in trilingual acquisition. Phonological awareness was expected to predict children's early reading ability, which could be transferred across languages.

METHODS

Participants

One-hundred and fifty (150) Chinese-speaking children participated in this study. These participants were 6 to 7 years old and enrolled in Year 1 (this is equivalent to Grade 1, for example, in the UK or US). They were randomly chosen from six national Chinese primary schools in Selangor, Malaysia. Three schools are situated in urban areas and another three schools are in rural areas (<https://www.selangor.gov.my>). The participants consisted of 85 boys and 65 girls. 78 were from urban schools and 72 were from rural schools. Participants used Chinese as their native language and attended local primary schools in which Chinese was the teaching medium. They had been exposed to written forms of Chinese, English and Malay languages starting from 4 or 5 years old in kindergarten. The children learned English and Malay as second and third languages. After defining the criteria, participants were randomly selected by using pattern number selection from their class name list.

Measures

A battery of tests was designed to measure participants' phonological awareness and reading ability. Three tasks of phonological awareness and two tasks of reading were administered in Chinese, English and Malay languages. These tasks were adapted and comparable to each language.

Phonological Awareness. Participants were given the adapted phonological

awareness subtests of the Comprehensive Test of Phonological Processing (CTOPP-2) (Wagner et al., 2013), which was deemed suitable to the participants. The phonological awareness contained three subtests: deleting, blending and segmentation of sounds. Each task consisted of four practice trials and 10 experimental trials.

Chinese phonological awareness. In the sound deletion task, participants were asked to delete either the onset or rime unit of a syllable. For example, when given syllable /ba1/, participants were asked to delete the onset /b/ sound. The answer in this case is /a1 /; or syllable /mei3/ delete rime /ei3/ sound where answer is /m/. In the sound blending task, participants combined the onset and rime unit of a syllable. For example, onset /c/ and rime /ai4/ were sounded out separately and participants were asked to combine these two sounds to produce a syllable /cai4/. Lastly, in the sound segmentation task participants were asked to detect the onset and rime sound, and then sound them out separately. For example, syllable /hua1/ segment it into /h/ and /ua1/ (Chow et al., 2005; Li et al., 2010).

English phonological awareness. In the sound deletion task, participants were asked to delete the onset-rime or phonemic unit of a syllable. For example, participants were given a task to “say /pat/ without /p/ at the onset-rime level or phonemic level, or to “say /book/ without the /k/ sound. In the sound blending task, participants combined the onset-rime or phonemic unit of a syllable to produce a word. For example, combining phonemes /c/, /a/ and /p/ to sound out the

syllable /cat/. In the sound segmentation task, participants were asked to detect the onset-rime or phonemic sound and then sound them out separately. Example: “tell me the first sound, middle sound and the last sound of /map/”, where the response will be /m/, /a/ and /p/ (Wagner et al., 2013).

Malay phonological awareness. For the sound deletion task, participants were asked to delete the onset-rime or phonemic unit of a syllable. For example, participants were given a task to “say /kan/ without /k/ at onset-rime level or phonemic level, or to “say /lam/ without the /m/ sound. Participants combined the onset-rime or phonemic unit of a syllable to produce a word. For example, combining phonemes /d/, /a/ and /n/ to sound out the syllable /dan/. For the sound segmentation task, participants were asked to detect the onset-rime or phonemic sound and then sound them out separately. Example: “tell me the first sound, middle sound and the last sound of /mah/”, where the response will be /m/, /a/ and /h/ (Lee, 2008; Lee & Wheldall, 2011).

Early Reading. Word reading. The single word recognition items were chosen from the Grade 1 vocabulary word list in the Chinese, English and Malay languages curriculum for national schools (Curriculum Development Centre, Ministry of Education). The words on the vocabulary word list were first analysed and categorised based on their phonological structure (both syllable and phonic structure). Items were chosen based on the resultant categories that emerged. The final selection consisted of 50 words. Participants were required to read

aloud all the words that were arranged in order of increasing phonological complexity.

Text reading. The text reading sentences were chosen from Grade 1 Chinese, English and Malay languages textbooks in accordance with the curriculum for national schools (Curriculum Development Centre, Ministry of Education). Sentences were chosen based on the complexity of the words in the sentences. Two or three paragraphs were selected from the front, middle and back chapters of the books.

Procedure

Parental/guardian consent was obtained before testing. Participants answered the questions asked by the researcher. All task instructions were administered in Chinese language, which was the first language of the participants. Two testing sessions were conducted to avoid any risk of fatigue on the participants and every session is about 20 minutes.

Table 1

Means and standard deviations of children's phonological awareness and early reading performance for three languages

Task	Language					
	Chinese		English		Malay	
	M	SD	M	SD	M	SD
Phonological Awareness (Max =10)						
Sound deletion	4.49	3.42	4.93	3.88	6.30	2.89
Sound blending	5.57	3.94	5.44	3.35	7.45	2.70
Sound segmentation	3.51	7.74	5.88	3.43	7.27	3.26
Early Reading (Max = 100)						
Word reading	74.25	25.38	59.92	34.27	63.45	35.79
Text reading	83.48	25.13	72.43	32.85	68.81	35.80

Data Analysis

The PLS path modelling was used to analyse the relationships. Firstly, descriptive analysis was conducted to calculate means and standard deviation for all the tests in three languages (see Table 1). Secondly, prior to the main analysis, steps such as coding data, treating missing data and checking normality were conducted (Hair et al., 2010). Once these steps were done, the PLS path modelling was done using Smart PLS 3.0 software to test the theoretical model (Ringle et al., 2015). Thirdly, measurement model properties were assessed to ascertain the validity and reliability of the relations between the indicator and latent constructs. Lastly, structural model analysis was conducted to assess the significance of the path coefficients for the main model (Hair et al., 2014).

RESULT

Table 1 presents means and standard deviations of the measures.

Measurement Model Assessment. To assess the measurement model, internal consistency reliability, individual item reliability, convergent and discriminant validity were ascertained (Hair et al., 2014). Individual item reliability was assessed by examining the outer loadings of each construct’s measure. Items with loading at least 0.708 or above indicated that the items used obtained significant reliability (Hair et al., 2014). Table 2 shows the outer loading for all the items ranging from 0.838 to 0.976.

Internal consistency reliability of measures was ascertained by examining the composite reliability coefficient. Table 3 shows the composite reliability coefficients of the latent construct ranging from 0.908 to 0.977. Based on the rule of thumb, the composite reliability should be at least 0.70 or above (Hair et al., 2014). It shows adequate internal consistency reliability of the measurements. Convergent validity was ascertained by examining Average Variance Extracted (AVE). The AVE of the latent constructs shown in Table 3 ranged from 0.767 to 0.955 in which the above rule of thumb minimum value 0.50 was met (Hair et al., 2014).

Table 2
Individual item reliability (outer loading)

	PAL1	PAL2	PAL3	L1	L2	L3
PAL1-1	0.897					
PAL1-2	0.838					
PAL1-3	0.890					
PAL2-1		0.915				
PAL2-2		0.906				
PAL2-3		0.910				
PAL3-1			0.879			
PAL3-2			0.922			
PAL3-3			0.888			
ReadL1-1				0.975		
ReadL1-2				0.973		
ReadL2-1					0.977	
ReadL2-2					0.978	
ReadL3-1						0.975
ReadL3-2						0.976

Table 3

Internal consistency reliability and convergent validity

Latent Construct	Items	Conbach's alpha	Composite reliability	AVE
Chinese Phonological Awareness	PAL1	0.848	0.908	0.767
English Phonological Awareness	PAL2	0.897	0.935	0.829
Malay Phonological Awareness	PAL3	0.878	0.925	0.804
Chinese Early Reading	L1	0.947	0.974	0.949
English Early Reading	L2	0.953	0.977	0.955
Malay Early Reading	L3	0.949	0.975	0.952

Besides, the Fornell-Larcker criterion was used to ascertain discriminant validity (Fornell & Larcker, 1981). It compared the correlations of square roots of AVE with the latent variables. To establish discriminant validity, the square root of each latent construct's AVE should be larger than its correlations with other latent constructs (Hair et al., 2014). In Table 4, all the latent constructs met this criterion indicating adequate discriminant validity.

Structural Model Analysis. The causal relationships between latent constructs were obtained by running the PLS-SEM algorithm (Ringle et al., 2015). Path

coefficient which represents the causal relationships indicated by direct effect, β . A non-parametric bootstrap procedure was used to test the significance of the path coefficients for the structural model. In bootstrapping, a number of 5,000 bootstrap samples was applied (Ringle et al., 2015). Table 5 presents the path coefficients of all direct effects, β for the research model. Figure 1 depicts all the significant paths between latent constructs for the research model. The numbers shown near the arrows is the path coefficient between the latent constructs. Value of β indicating the strength of the path coefficient.

Table 4

Validity discrimination (correlations among latent construct)

Latent Construct	L1	L2	L3	PAL1	PAL2	PAL3
L1	0.974					
L2	0.676	0.977				
L3	0.675	0.913	0.976			
PAL1	0.390	0.660	0.657	0.876		
PAL2	0.451	0.756	0.741	0.877	0.910	
PAL3	0.620	0.842	0.887	0.755	0.815	0.897

Table 5
Path coefficients

	Direct effect, β
Chinese phonological awareness -> Chinese early reading	-0.163
Chinese phonological awareness -> English early reading	-0.130
Chinese phonological awareness -> Malay early reading	-0.116
English phonological awareness -> Chinese early reading	-0.041
English phonological awareness -> English early reading	0.310*
English phonological awareness -> Malay early reading	0.148
Malay phonological awareness -> Chinese early reading	0.779**
Malay phonological awareness -> English early reading	0.688**
Malay phonological awareness -> Malay early reading	0.853**

Note. *Significant at $p < 0.01$, **Significant at $p < 0.001$

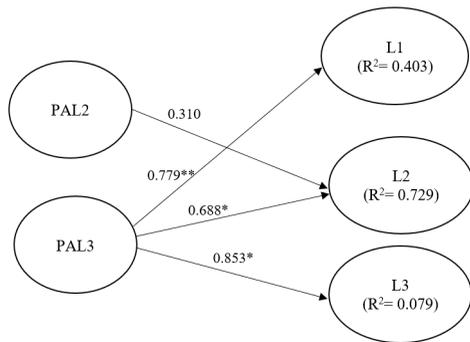


Figure 1. Significant path of research model

Note. PAL2 = English phonological awareness, PAL3 = Malay phonological awareness, L1 = Chinese early reading, L2 = English early reading, L3 = Malay early reading.

*Significant at $p < 0.01$. **Significant at $p < 0.001$

This study focused to answer two research questions. Firstly, do phonological awareness skills predict children’s early reading? Phonological awareness is expected to be able to predict children’s early reading ability. Results in Table 5 revealed that Malay phonological awareness

had a very strong significant positive relationship with Malay early reading ($\beta = 0.853, p < 0.001$), followed by English phonological awareness in a significant positive relationship with English early reading ($\beta = 0.310, p < 0.01$). However, there was no significant relationship between Chinese phonological awareness with Chinese early reading. Results showed that phonological awareness only predicts children’s early reading in English and Malays languages, not Chinese.

Secondly, do phonological awareness skills in L1 (Chinese) transfer to early reading in L2 (English) and L3 (Malay), or vice-versa? Results indicated Chinese phonological awareness did not affect early reading in English and Malay. In addition, English phonological awareness also suggested no effect on Chinese and Malay early reading. However, the results provide empirical support for cross-language transfer in Malay phonological awareness

because Malay phonological awareness showed significant positive relationships with Chinese and English early reading ($\beta = 0.779, p < 0.001$ and $\beta = 0.688, p < 0.001$).

After the significance of path coefficients for the research model were ascertained, next the level of the R-squared values was assessed. Figure 1 presents the R-squared values of the latent constructs of early reading in Chinese, English and Malay (L1, L2 and L3). As depicted in the numbered circles, the construct of phonological awareness showed the most variances in Malay early reading (L3) at 79% of the total variance. This was followed by English early reading in which phonological awareness showed 72.9% of the total variance. Phonological awareness showed only 40.3% of the total variance in Chinese early reading. R-squared value of 0.10 was proposed as a minimum acceptable level (Falk and Miller, 1992). Following this recommendation, latent constructs of L1, L2 and L3 had an acceptable level of R-squared values.

DISCUSSION

This study aimed to examine the relations between phonological awareness and early reading in the acquisition of Chinese, English and Malay languages. Results revealed that phonological awareness had a strong and positive relationship with early reading in both Malay and English languages, but not Chinese. When comparing the three languages, phonological awareness strongly predicts children's early reading in the Malay and English languages, while

phonological awareness was not a predictor for early reading in Chinese.

According to Ziegler and Goswami (2005), different languages vary in the orthographic consistency and grain size of the orthography-phonology correspondences, which play important roles in the acquisition of reading. Reading in consistent orthographies involves small linguistic units, whereas reading in inconsistent orthographies requires the use of larger units also. English and Malay, due to the nature of their alphabetic script, are consistent orthographies with strong letter-sound correspondence. Small grain size units of processing such as single letters and phonemes are favoured. Phonological awareness of smaller units of phonemes tend to be strongly associated with early reading, especially word decoding in English and Malay. Chinese, on the other hand, is an inconsistent language because of its logographic script which favours larger grain size units such as syllables and rimes.

Phonological awareness did not predict Chinese character recognition and text reading. This finding, in line with previous studies (Chow et al., 2005; Chung & Ho, 2010; Mc-Bride-Chang et al., 2008; Wang et al., 2003), demonstrate that phoneme awareness is relatively less important for Chinese reading because the phoneme is not explicitly represented in Chinese orthography. Larger grain size including syllables and rimes may be better predictors of Chinese reading development, unlike the alphabetic orthographies of English and Malay where phonemes tend to be strongly

linked to the reading process (Li et al., 2010; Ziegler & Goswami, 2005).

In this study, phonological awareness skills in the first language were investigated to determine whether to facilitate second or third language early reading. Results indicated Chinese phonological awareness did not associate with English and Malay early reading. In this case, Chinese phonological awareness skills did not facilitate English and Malay early reading. English phonological awareness also revealed no effect on Chinese and Malay early reading. These findings indicated no cross-language transfer from neither Chinese nor English phonological awareness to facilitate early reading in the acquisition of three languages. However, results indicated that Malay phonological awareness showed significant and positive effects on Chinese and English early reading. This provides empirical evidence to cross-language transfer of Malay phonological awareness to Chinese and English early reading (L3 → L1 and L3 → L2).

The theory of backward transfer was supported in this study (Goldstein & Bunta, 2012). Previous cross-language transfer studies had provided evidence for backward transfer (Cenoz & Gorter, 2011; Chen et al., 2010; Jarvis & Pavlenko, 2007; Talebi, 2012). For example, Jarvis and Pavlenko (2007) stated that skills transfer can take place in many directions, such as “forward” (L1 → L2) and “backward transfer” (L2 → L1 or L3 → L2). Cenoz and Gorter (2011) have shown several possible transfer directions, includes L2 (Basque) → L1

(Spanish), L3 (English) → L2 (Basque), and L3 (English) → L1 (Basque). Chen et al. (2010) proved that L2 second language phonological instruction (English) speeds up phonological awareness of children in their first language (Chinese) through cross-language transfer (L2 → L1). In addition, the findings of this study are also in line with the findings of Talebi (2012). Talebi had proven that the transfer of reading strategies could be transmitted across all languages regardless of the orthography and phonological systems. Therefore, in this study, it can be expected that phonological awareness can also be transferred as a reading strategy. Talebi believes that by teaching reading strategies in second language learning, not only could improve their second language reading, but also increased their ability to read in the first language as a result of the backward transfer.

Transfer of phonological awareness skills may occur from L3 to L1 or L2, because phonological awareness skills involve in common underlying cognitive processing for any language acquisition. The positive transfer relationship showed in this study, indicated that an increase in phonological awareness development in Malay early reading would facilitate the acquisition of phonological awareness skills, which can be applied to English and Chinese early reading.

Findings did not support the Interdependence Hypothesis (Cummins, 1979) for Chinese phonological awareness. L1 phonological awareness not transferable to L2 and L3 early reading due to the

drastic orthography differences. However, findings did support Cummins's Threshold Hypothesis which proposed that skills transfer might occur provided the child had attained a certain level of competence in a language. The skills transfer may occur from dominant to the weak one (Cummins, 1981). In this study, Malay phonological awareness demonstrated high performance in sound deletion, blending and segmentation tasks (see Table 1). These high performance skills may be transferred and facilitate or accelerate the acquisition of phonological awareness in Chinese and English, which are weaker in these skills (Goldstein & Bunta, 2012).

The transfer from L3 to L1 and L2 occurs. This is probably because the phonological system of the Malay language is easier to master and makes it more likely to be transmitted and shared with other languages. The Malay phonological system is easier to learn compared to English because of its simple phonological system (Haron, 2011). The syllabus method was used in Malaysia to teach children to read the Malay language at the beginning of the reading as early as at the kindergarten level (Abd. Talib, 2000). It has grapheme-phoneme correspondence like English, but it also has a systematic phonological system of one letter representing one phoneme. Thus, children are exposed to the syllable system at kindergarten and are able to acquire syllabus skills easily comparable to Chinese and English. Indirectly, the concepts of the phonemes and some phonological skills may be transferred.

Literacy skills also help children to understand the relationship of grapheme-phonemes in alphabetic writing systems, thus increasing phonemic awareness (Chen et al., 2010). Children begin to receive early reading instructions and orthographic depth has an important impact. This study found that children who learn to read shallow orthography including the Malay language can develop phonemic awareness faster than children who are learning to read deep orthography including English, where the grapheme-phoneme correspondence is less consistent (Goswami, 2003). In addition, based on Chinese orthography in which each basic graphic unit of Chinese is a character that is associated with a morpheme, children acquire Chinese reading skills by "look-and-say" regardless of grapheme-phonemes. Subsequently, the transfer of phonological awareness from Chinese to English or Malay does not occur. Instead, the transfer occurs from Malay (L3) to Chinese (L1) and English (L2). This is due to the adequacy of exposure and motivation to L3. Finally, the Malay phonological system is easily mastered, and phonological awareness skills tend to be transferred and shared in English and Chinese reading.

CONCLUSIONS

The cross-language relations between phonological awareness and early reading in the acquisition of Chinese language, English and Malay were investigated. Results revealed that phonological awareness had strong and positive relationships with early reading in both Malay and English

languages, but not Chinese. Phonological awareness is relatively less important for Chinese reading because the phoneme is not explicitly represented in Chinese orthography. Larger grain size may be better predictors of Chinese early reading. The alphabetic orthographies of English and Malay where phonemes tend to be strongly linked to the reading process. Furthermore, there was no skill transfer from Chinese language to English and Malay due to orthography differences (logographic vs alphabetic). However, cross-language transfer was found as Malay phonological awareness strongly predicted Chinese and English early reading ability. The backward transfer of phonological awareness skills had been proven in this study.

These findings provide important information for teaching and learning second and third languages in the classroom. The children from a non-alphabetic L1 background such as Chinese tend to apply word reading strategies that are effective for reading Chinese when they need to decode English or Malay words. This may lead to reading problems in English or Malay languages. Thus, explicit instructions in phonological awareness is necessary in children's early years.

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Politeness Strategies of The *Pembayun*(s) in The Bride-Kidnapping Practices of Sasak Culture

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ABSTRACT

Bride-kidnapping is considered a violation of human rights in many cultures worldwide, but among the Sasak people of Lombok, it has deep customary implications. While the act itself is consensual between the couple, it is an occasion for the families to confront each other and discuss settlements or dispute the offers between each other. The negotiation is a show of tradition or customary norms where politeness strategies is observed during the discussions between the two disputing parties affected by the bride-kidnapping. During the discussions, rituals such as *Sejati*, *Selabar*, and *Sorong Serah* are conducted to neutralise anxiety, address face attacks and reduce disputes that may have arisen due to the bride-kidnapping. In these three rituals, the language resources of the representatives of both families, also known as *Pembayun* (*adat leaders*), is to negotiate and come to a settlement through polite discourse. This study is an ethnographic enquiry and data were analysed based on Brown and Levinson's model of politeness. The study revealed that the most

preferred strategy was negative politeness used by both the *Pembayun* in the bride-kidnapping rituals. The notion of politeness and the strategies in which it is achieved in communication is culture-bound and culture-specific.

Keywords: Bride-kidnapping, marriage rituals, politeness strategies, Sasak culture

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INTRODUCTION

The Sasak of Lombok, West Nusa Tenggara Indonesia are mostly Muslims who are maritime people. The influence of the Balinese Hindu culture is clearly seen in the unique customary practices and rituals within this Muslim community. As was the practice in many other past kingdoms in the world, local women were made to serve and please the kings, and the same was seen in the history of the Balinese kings in Lombok who often took Sasak ladies as concubines. The recurrence of this obsession for Sasak women caused the Sasak families to reluctantly become accustomed to this practice as they continued to fear and endure the practice among the royalty and the upper class. The marriage practices among the Sasak is performed by kidnapping a woman (bride-kidnapping) from her family.

The practice of bride-kidnapping is a result of Sasak history which was influenced by the Balinese and Javanese kingdoms (Haq & Hamdi, 2016). Meanwhile, from the etic perspective, bride-kidnapping (*Merariq*) in several areas in Indonesia such as Bugis, Makasar, South Sulawesi, Java and others, is a violation of the customary law and a disgrace for both families (Tahir, 2012). Unlike the many cultures which observe bride-kidnapping that ends with rape and impregnating the woman, such as in Central Asia, parts of South Africa (called "*ukuthwala*") and in part of Europe, the marriage culture of the Sasak people is believed to be inspired by love. The Sasak bride-kidnapping is consensual and is in reality elopement rather than bride-

kidnapping since members from both parties assist in staging the so-called bride-kidnapping.

Thus, from the emic perspective, the Sasak in Lombok have developed the cultural cognition that practising bride-kidnapping is a noble custom. In the Sasak culture, bride-kidnapping (*merariq*) is defined as the process of marriage and a cultural marriage ritual. The efficacy of this bride-kidnapping has become a kind of cultural practice where the conceptualisation of the community is reflected through how they redefine and renegotiate the concept of marriage and view the world (Grace, 2004; Smith, 2014).

However, over the years, families would ensure that a suitable bride is paired with their son and this is often the reason for families to encourage bride-kidnapping to circumvent other suitors and to ensure that their son ends up with the woman he loves. This was done in an effort to preserve the honour, accord status, and empower the Sasak women, as they had a choice of whom they wanted to elope with. According to Zuhdi (2012), although the influence of Balinese culture in Lombok is evident, bride-kidnapping is only found in the Sasak culture while bride-kidnapping in Bali is in itself the marriage contract. This marriage is in contrast to the bride-kidnapping in the Sasak community where bride-kidnapping is an initial part of the marriage. The entire marriage is a juxtaposition of both cultural (Balinese-Sasak) practice and religious (Muslim) requirements. After the bride-kidnapping, the solemnisation of marriage

rituals would be in accordance with the Islamic teachings.

The marriage tradition in the Sasak community also includes other forms of marriages such as match-made marriages. However, this matchmaking pattern is almost lost or no longer in existence among the Sasak community, especially in rural areas because marriage is considered the individual's right and choice. The couple are the ones who decide whether it is going to be a private affair without the need for a coercive parent and family. Most Sasak people consider marriages through matchmaking as a last resort and this is considered a setback because it is not always in line with the choice of the couple (Dhana, 2000). Meanwhile, a proposal or request directly to marry one's daughter can be regarded as an insult to the parents of the girl and her family. Thus, the expression of the Sasak people "*merariq dek ne pade marak ngendeng anak manok*" (Asking for one's hand in marriage is not as simple as asking one to hand over 'baby chicks'). On the basis of the above perceptions, it justifies the Sasak community's practise of bride-kidnapping (*merariq*). However, it appears to be a violation of customary norms and creates disputes between the two families when particular issues are not up to the expectations of either one family.

The Sasak *Pembayun*

Due to the sensitivities of the practice of bride-kidnapping, settlements or solutions are to be proceeded in the form of negotiations between the prospective groom

and bride's families through rituals such as *Sejati*, *Selabar*, and *Sorong Serah*. The aims of the rituals are to resolve the dispute as well as to make the bride-kidnapping known to the community (Adithia, 2010; Dhana, 2000; Fajriyah, 2016; Sirajudin, 2001; Yaqin et al., 2013). In these three ritual stages, family representatives or *Pembayun* are elected to initiate communication between the families. The *Pembayun* are only male representatives, who are chosen by each family to settle the dispute. The *Pembayuns* are usually those with some experience and are older family members who know the family expectations. In accordance with the status of the family he represents, the *Pembayun* plans the strategy, with the approval of that particular family. The *Pembayuns* from both families proceed to influence each other to accept particular terms and conditions as a prerequisite to the performance of the customary religious wedding.

The discussions between the *Pembayuns* is viewed as a dispute resolution that involves emotions and feelings as much as thoughts and ideas that represent those of the families. Naturally, the message or act to be delivered by the *Pembayun* may contain 'threats' to the addressee's emotion or feeling, or what in pragmatics is referred to as 'face' (see, for example, Brown & Levinson, 1987; Goffman, 1974). It is generally the case, therefore, that the act as such is to be redressed or mitigated to the extent that the potential 'damage' could be mitigated to some degree. It is the strategies in this act of redressing or mitigating,

sometimes enforced with persuasive emphasis that concerns politeness strategies. Therefore, the study of politeness strategies in bride-kidnapping needs to be investigated to capture the strategies of the *Pembayuns* when dealing with bride-kidnapping among the Sasak.

Brown and Levinson's Politeness Theory

This theory is vital in the practice of communicating politely. Communication that seeks solely to achieve the effective communication of information and ignores the value of politeness may not augur well for interlocutors (Yaqin & Shanmuganathan, 2018). This means that politeness determines the success of communication. The value of politeness is as important as the value of the information intended. Based on this fact, pragmatics experts offer perspectives or models of language theories to maintain the practice of communicating well with as little dispute as possible.

Pragmatics researchers (Fraser, 1990; Huang, 2007; Reiter, 2000) argue that there are four main models of politeness theory. The four models are (a) face-saving (b) conversational maxim model, (c) conversational-contracts model and (d) social norms model. Among these models, the most influential and comprehensive model is the face-saving model proposed by Brown and Levinson (Watts et al., 2008). In relation to Brown and Levinson's politeness model, Coupland et al. (1988) suggested that Brown and Levinson's analysis was one of the major forces that recorded the realisation

of communicative strategies as lexical/structural choices in various languages. However, Brown and Levinson's politeness models have been criticised and continue to be criticised as archaic, in terms of its universal claims. However, Kadar and Mills (2011) pointed out that most theories of politeness had been developed in response to the Brown and Levinson model, which was seen as ethnocentric and based on pragmatic communication perceptions (see Eelen, 2001; Watts, 2003). Hence, post-modern theory of politeness considers the climate, culture and practices of the community under study (e.g., Locher & Watts, 2005; Mullany, 2006; van der Bom & Mills, 2015).

On the other hand, some experts argue that there are aspects of Brown and Levinson's model that can still provide analysts with technical concepts that are relevant (e.g., Grainger, 2018). Harris (2003) suggested that Brown and Levinson's politeness model had an important contribution to the analysis of institutional data, while O'Driscoll (2007) recommended the adjustment of Brown and Levinson's work to be used in cultural interaction. Similarly Holmes et al. (2012) saw that the concepts of Brown and Levinson were useful in workplace analysis.

In this study, the researchers argue that Brown and Levinson's model can help explain the ongoing interactions between the *Pembayuns* as they conduct the ritual negotiations representing the two families. The issue of bride-kidnapping becomes more complicated if only the couple and not their families are in favour

of the marriage alliance. In this case, meaningful negotiations are crucial for the outcome of the discussions. As Harris (2011) suggested, earnest, and sometimes life-changing decisions could be influenced by interactions between participants, and in this case the families represented by the *Pembayuns*. The prospect that both families are to some extent going to face each other in future for all family events, appropriate politeness strategies are sought to mitigate the discussions. Brown and Levinson's model of politeness strategies not only define intentions but shows how participants make meanings during the interactions within the various aspects of the discursive content and context.

Brown and Levinson's (1987) theory of linguistic politeness was coupled with Goffman's concept of 'face', which in Goffman's definition is "*the positive social value a person effectively claims for himself by the line others assume he has taken during a particular contact*" (Goffman, 1974). To Goffman, a person in social contact with others tends to experience an immediate emotional response with regards to the way such a context serves his face. Brown and Levinson identified two aspects of the face, namely the positive face and negative face. They defined 'positive face' as the positive, consistent self-image or personality' claimed in interactions (Brown & Levinson, 1987). The other aspect of the 'negative face' is more oriented to a person's 'territory,' 'self-protection' and 'freedom of action'. Based on Brown and Levinson's "positive face" and "negative face," several

strategies could be used to minimise FTAs (Izadi, 2013).

According to Brown and Levinson, the speakers perform FTAs when pronouncing an utterance which could threaten the addressee and could use either the on-record strategy or the off-record strategy. In the extreme case of on-record strategy, speakers use utterances without adjustments, and they appear to be less polite, while off-record strategies are used to sound indirect to the extent that the intention and inference could cause confusion. However, depending on the situation or context, or even the cultural practice, the intention for choosing such strategies can be justified. Therefore, to maintain politeness, the speaker should maximise strategies that can minimise FTAs through positive and negative politeness strategies.

The face is, therefore, a construct of some sort that can be either maintained or lost through interaction, of which interactants are continually aware and for which they seem to have mutual 'guarding' strategy to the effect that a face is likely to be preserved or enhanced rather than lost. At the heart of this, Brown and Levinson postulate that certain acts of communication are intrinsically face-threatening. These, which they consistently refer to as 'face-threatening acts,' become the central issue in the linguistic politeness theory that they develop. Essentially, to Brown and Levinson, politeness is the speaker's strategy to minimise the effect of face-threatening acts in communication.

Although Brown and Levinson's (1987) framework is regarded as one of the most influential to address the phenomenon of politeness, a review in the previous section identified important issues with the approach. As Watts (2003) noted, while no study can completely undo Brown and Levinson's conceptualisation of politeness, they may help to 'correct and disentangle' original views. In this respect, how the *Pembayuns* establish harmony in line with their sociocultural rules of language use and the type of politeness strategies used to reach an amicable settlement for the act of bride-kidnapping as endorsed by the Sasak community will be discussed.

METHODOLOGY

The study used a qualitative approach to examine the detailed rituals involved in bride-kidnapping and the interaction between the *Pembayuns* who acted as representatives of both families. The *Pembayuns* may not be related to the family but may have been a close alliance or an old family friend, or a descendant of the *Pembayun* who had represented the family in the past. As such, the study was focused on the communicative behaviours of the interacting *Pembayuns* within the social rituals of the Sasak community.

Data and Data Collection Procedures

The data used in the study comprised audio/video recording of approximately nine hours of interaction recorded during the *Sorong Serah* ritual of the marriage ceremony. The *Sorong Serah* ritual is the final phase

before the marriage where an official ceremonial procession from the groom's side would seek a sit-down discussion with the bride's side. The primary data consisted of a live video recording of the *Pembayuns* in action during the interaction between both parties in one marriage ceremony. The entire exchange between the *Pembayuns* were presented as is and were not edited nor revised. The duration of each stage in the *Sorong Serah* ritual of the marriage ceremony was between 50 and 70 minutes. The length of each data varies as the negotiations differed according to how fast the family relented to accept the settlement. Data was orthographically transcribed and the study used a simplified version of Jefferson's transcription convention.

Data collections were carried out at the Sakra district of West Lombok regency in West Nusa Tenggara, Indonesia through observations and interviews. The researchers used two kinds of observation methods, namely participant observation (as a past 'abductor') and non-participant observation (the interaction between the *Pembayuns*). Both methods required the researchers to conduct video recordings and note-taking in a particular location while interacting with the participants (i.e. family members and the *Pembayuns*). Semi-structured interviews were carried out to allow the participants to talk and provide information about the ritual and the meaning of the rituals. The topics of discussion in the interviews were based on threads of conversation concerning among which particular rituals, the *Pembayuns*' roles, the strategies used to negotiate,

and any other information about bride-kidnapping practices. Facial expressions and gestures indicated emotions of anxiety, displeasure, irritation, and impatience during the interactions and were used as indicators that signalled the emotional state of the *Pembayuns* and their use of politeness strategies.

RESULTS AND DISCUSSION

There was significant use of negative politeness strategies among the *Pembayuns* during their formal face-to-face interaction in the presence of both family members of the couple during the *Sorong Serah* ritual. The preference for the negative politeness strategies indicates the Sasak were concerned about being deferential and self-effacing towards the offended or afflicted party (Garcia, 1989), i.e. the bride's family.

Types of Politeness Strategies

Negative politeness was found to be one of the more prominent of the two redressive on-record ways of doing FTAs as postulated by Brown and Levinson (1987). An utterance is regarded as containing a negative politeness strategy when the illocutionary act reflects the speaker's intention to satisfy the addressee's negative face, in which the addressee wants to be unimpeded and wants to enjoy the freedom of action. The manifestation of such intention in communication is reflected in the speaker's use of certain devices, both from the pragmatic and linguistic aspects, in which

the utterances carry the illocutionary act.

In line with Brown and Levinson's (1987) conception of 'negative face', the *Pembayuns*' negative politeness strategies can be subsumed under two main categories, namely, 'appealing' strategies and 'softening' strategies. While a set of sub-categories belongs to the former, the latter consists basically of 'direct' and 'conventionally indirect' strategies. The direct softening strategies can further be classified as those using 'supportive moves' and those that employ 'downgraders' (cf. Blum-Kulka et al., 1989). The supportive moves and downgraders are identified as softening devices. The conventionally indirect strategies, too, include a number of different modes of softening the force of FTA-carrying utterances.

Appealing Strategy

During the *Sorong Serah* ritual, the groom's family would seek the help of the *Pembayun Penyerah* (Ph) who is the main spokesperson for the family and is assisted by *Pembayun Pisolo* (Po) in terms of seeking permission to have a meeting, helping to deliver the gifts to the bride's family and in ensuring that her family is willing to start the discussions. On the bride's family, there is only one main representative, the *Pembayun Penampi* (Pi) who would speak on the family's behalf. Appealing strategies are used mostly by the *Pembayun Penyerah* (Ph) representing the male family, to mitigate certain illocutionary acts.

Appeal strategies are used by the family of the groom to appeal to the bride's family

on several instances. On arrival of the party to the bride’s village, the assistant, *Pembayun* Po would appeal to the *Pembayun* Pi to give consent to have a discussion, and also to accept their gifts as compensation. Throughout the discussions, the appealing strategy was the most prevalent strategy used, with the potential of threatening the addressee’s negative face. These strategies are shown in Table 1 and are marked by the speaker’s use of certain linguistic devices to do FTAs such as acts of requesting, suggesting, and reminding.

A type of appealing device found frequently in the *Pembayuns* utterances is the ‘approval strategy,’ which is represented by an interrogative lexical form *nggih* which is realized as a question tag at the end of an utterance. The form *nggih* occurs when the speaker chooses to use the refined level or variation of the language. So, *nggih* is one different form of the same appealing device the choice of which is related to the speaker’s decision on what speech level to use. As a pragmatic device, the form *nggih* is not semantically empty as it can be used to express a semantic meaning equivalent to either ‘yes’, ‘right’, or ‘okay’, which pragmatically expresses ‘agreement’, ‘acceptance’, or ‘approval’. The form *nggih* in the Sasak language is very productive in the sense that it may serve different functions in communication. The

following extract serves to illustrate how the *Pembayun* Ph (groom’s side) seeks to get the approval from *Pembayun* Pi (bride’s side) whether the gifts sent as compensation was acceptable to the family.

Data 2:

- 5 Pi : *Sampun bise ketampi, nggih?*
Is it accepted, yes?
- 6 Po : Alhamdulillah, matur agung
tampiasih
Alhamdulillah, Yes, Thank you
very much.

In extract (1), Pi uses the question tag ‘*nggih*’ to soften the question. This strategy is similar to the acceptance strategy as the use of the lexical ‘*nggih*’ share the same linguistic form. The *nggih* form in the Sasak language is very productive and using lexical ‘*nggih*’ at the end of the utterance (Line 5), Pi has laid the phrase *sampun bise* (Noble Sasak language) to show over-politeness by combining *sampun bise* at the beginning and ‘*nggih*’ at the end of the utterance. (see Izadi, 2016; Watts, 2003).

Softening Strategy

The softening strategy was found to be used by both *Pembayuns* in direct and conventional indirect strategies in the *Sorong Serah* of the marriage ceremony

Table 1
Appealing strategy of negative politeness

Sub-Strategy	Device Used	Realisation	Act Redresses
Approval Strategy	Lexical	<i>Nggih</i>	Request, Suggestions, Order

to downtone the act of bride-kidnapping. Direct strategies can be divided into two categories. The first category refers to external modifications called supportive moves, while the second category refers to the ‘downgraders’.

Direct Strategies Used as Supportive Move

The study found that the *Pembayun* used direct strategies as a sub-strategy as shown in Table 2:

One of the strategies used by the *Pembayun* to soften the FTAs is to make the addressee willing to accept an action. This is revealed in the use of a pragmatic device called a ‘preparator’ which is a term introduced by Blum-Kulka et al. (1989) and their study on requests. In this case, the speaker prepares the addressee to make him aware of his actions (requests, orders, suggestions, reminders and so forth) and intentions. This strategy makes an act less direct so that its force is minimised. One type of supportive move strategy is the *preparator* which acts as an external element of utterance to the next action (Blum-Kulka et al., 1989). This device works to provide the addressee subsequent actions and therefore, usually leads to the next course of action. Extract (2) shows an example of which this device is used to

prepare the other side on subsequent action. In Extract 2, the *Pembayun* Ph explains why the family was delayed and arrived late.

Data 12:

17 Ph : *Dewek titiang puniki matur wikan ritakale dewek puniki ligar saking negareng sakre, datang lian hikayakti punang sane mapak tan lupe-lupe ring dadalan wenten tapak punang harte brane sane wenten ring pungkur dewek titiang puniki,*

I must say that, when I left Sakre Village, the road was very crowded. There was a traffic jam, however, I did not forget to carry the luggage with me.

18 Pi : *Nggih, kanjeng rame agung durmalih dane hikang nyarenging sane mangkin pengarse agung.*

Yes, a noble spokesperson, and a group that accompanies you now.

In extract (2), Ph makes a humble request directed to Pi in the ritual of *Sorong Serah* meeting to accept his explanation of behalf of the groom’s family. The utterance of Ph in Line 17 ‘*dewek titiang puniki matur wikan ritakale dewek puniki ligar saking negareng sakre*’ (I must say that when I left from Sakra Village) is preparatory and intended to enable the addressee

Table 2
Supportive move of negative politeness

Sub-Strategy	Device Used	Realisation	Act Redresses
Preparator	Syntactic	Express preparing the act	Request, Suggestions

(Pi) to receive his request, “There was a traffic jam, however, I did not forget to carry the luggage with me”. As shown in this utterance, the preparator may specify deductions of information such as ‘I must inform that when I left from Sakra Village’ or ‘there is something I will notify’, which at the same time serves to inform the addressee of subsequent requests.

Direct Strategies Used in Downgraders

The findings show that ‘downgraders’ contain sub-strategies such as understaters as shown in Table 3:

The *Pembayuns* used a softening device (shown in Extract 3), a form of downgrading, known as ‘understater’. The device is characteristically manifested in non-quantifiable forms such as *sadidik* (a little). The Sasak language used ‘*semendak*’ and ‘*sekedik*’ (a short moment) where the speaker “underrepresented the state of affairs denoted in the proposition”. Blum-Kulka et al. (1989) explained that it was used in order to soften the force of the illocutionary act being launched. The device is used commonly with acts such as requests and orders. Extract 3 illustrates the use of this sub-strategy.

Data 12:

13 Pi : *Nggih, ampure, tiang sampun nunasan maring mamik, sanak, sampun niki jam 5 dawek yen pekayunan mangkin sadidik panegare dawekan wonten lami langing dawek sadidik eling*

Alright. I would like to apologise to the gentlemen present today. Now, it is five o'clock. Because we've been waiting for a long time, **it's good if you give us a little entertainment.**

14 Po : *Singgih, yen sekadi puniku dadih pangandike jeng handike maring tapengan agung sani mangkin ngaturan wantah-wantah sepisan puniku ugi*

Well, if it is felt like that, as you have told us, we would now offer a little entertainment.

Pembayun Pi in this extract expresses the request that the other party takes some form of action, perhaps in the form of entertainment to while away some time while waiting, thus appearing to be somewhat of an imposition to the addressee. The illocutionary force of the utterance ‘*sadidik*’ when softened is much weaker than it would have been. In fact, the *Pembayun* Pi exercised mild imposition in the form of a request targeted at the addressee *Pembayun*

Table 3
Downgraders strategy of negative politeness

Sub-Strategy	Device Used	Realisation	Act Redresses
Understater	Lexical	Sadidik	Request

Po. Except for the supposed justification in terms of unsymmetrical power distribution, the *Pembayun* Pi appears to assume more power at the point of this request. Even so, assuming the speaker does have more power, the threat of the imposing act to the addressee's face remains less severe as it would be if the power distribution is symmetrical or, even worse when reversed. The understater of the lexical '*sadidik*' as in Line 13 means that the addressee does not feel imposed upon.

Conventional Indirectness Strategies

Another type of negative politeness strategy utilised in the *Pembayuns* communication is recognisable as a kind of indirectness. Brown and Levinson (1987) referred to indirectness as any communicative behaviour that rendered more meaning than its literal meaning. The term 'conventional indirectness' has now been used to refer to the negative politeness strategy that combines the desire not to coerce the addressee (Kasper, 1990). This strategy is manifested in utterances that, by virtue of conventionalisation, have contextually unambiguous meanings, which differ from the meaning they literally render (Brown & Levinson, 1987). In this study, one mode of conventional indirectness is identified in the *Pembayuns*' communication with their interlocutors in the bride-kidnapping marriage rituals. The Conventional indirectness strategies shown in Table 4:

The *Pembayun* indirectly communicates certain FTAs, such as orders, requests, and suggestions by stating such acts as a

general rule to be obeyed. This means that the speakers communicate indirectly by asserting what is generally held as a rule, a norm, a convention, or an obligation without making explicit what the addressee or the speaker has to do with it as shown below.

(4) Data 1:

35 Pi : *Nggih dawek, muk olen dawek, pengonta sampun bareng isi kaen telungdase telu lembar dawek, jari ajin sewuita sak kenen suwita enampuluh enam dawek, ye mule harge adat rage tiang enam puluh enam utami, nunasan,*

Yes, please. If the gift *olen* has been checked with the contents and containing thirty-three pieces of cloths, please ensure the price is sixty-six. That is the custom price agreed upon by you and me. Please explain this.

36 Ph : *Singgih, nunas agung sinampure, dane-dane para pelinggih kerame sedaye pengemong kebaos saniwauh puniki, pare kauwal wargi kebaos sami sanak,*

Yes, alright. I sincerely apologise to the audience, *adat* representatives (traditional leader), village chiefs and family leaders present today.

This reflects the *Pembayuns*' intent and efforts to separate both speakers and addressee from FTAs and to escape from potentially threatening the addressee by way of coercion. In this strategy, the speakers also appear to indicate that the act is conveyed not because of his intention to impinge on the addressee but some

Table 4

The conventional strategy of negative politeness

Sub-Strategy	Device Used	Realisation	Act Redresses
Stating the Act as a General Rule	Syntactic	Expression of a Convention	Request, Order, Suggestions, Forbidding

regulation or normative convention held by the community. The speakers may also convey the FTA by indicating that certain obligations have to be met in relation to a particular religious or customary (*adat*) activity. Extract 4 illustrates the use of this strategy.

The strategies shown in extract 4 are used by Pi to assert to the addressee that the act of requesting is conveyed because of the convention held by the community. Thus, the addressee has to accept the amount according to the usual convention. So, on the face of it, there is no mention that the speaker wants something out of the ordinary, nor is there any wording about the addressees wanting something exorbitant. In other words, FTAs are conveyed without associating the interlocutor with it and thereby without compelling the addressee to accept it. This means, there is no potential FTAs inflicted on the addressee.

CONCLUSION

Based on the findings above, this study concludes that Bride-Kidnapping is a cultural practice that is deeply rooted in culture. The families rely on their representatives, the *Pembayuns*, to ensure the family status, name and dignity is kept at all times. Findings also show the apparent

use of negative politeness strategies used, particularly appealing strategy and softening strategies made up of the exchanges. In addition, the politeness strategies were also found, and a number of devices such as supportive moves, downgraders, and conventional indirectness devices were used throughout the negotiations.

The study explicates that in the Sasak culture, being polite is not motivated solely by the desire to save face but that these are moral demands in accordance with the cultural values of the community. In addition, the politeness strategies of the Sasak community does not conform only to the culture of that community but also reflects how cultural values and norms are embedded in the social activities of its people in which language acts as the vehicle for such activities. Finally, the notion of politeness and the strategies used to achieve the intent in communication are culture-bound and culture-specific.

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EFL Learners' Use of L1 in L2 Collaborative Reading Tasks and Their Attitudes towards It

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ABSTRACT

There have been irrefragable arguments over the use of first language (L1) in English as a Foreign Language (EFL) classes. The debates have been oscillating and vacillating between those who advocate the use of L1 and those who take an oppositional stance against the use of L1. There has been abundant research excavating this phenomenon, especially on L1 use in second language skills. However, there has been a dearth of research on whether L1 can have a significant role in reading. This study focused on the use of L1 in second language reading, specifically on learners' attitudes towards L1 and second language (L2) use while they were engaged in second language collaborative reading tasks (CRT). To this end, 60 intermediate EFL learners were selected and assigned in two homogeneous groups. After administering a questionnaire to the L1 class, the researchers found that the majority of the participants did not feature disagreement with the use of L1 while interacting with their peers. It was also found that, based on the descriptive comparisons of scores obtained by L1 and L2 class in the post-test reading, the performance of L1 class was not significantly better than that of their peers who did not use L1 in their collaboration.

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INTRODUCTION

The debate over target language and first language use in teaching and learning second and foreign languages has affected

a broad-spectrum body of literature. Ahmadian et al. (2016) mentioned that the genesis of sociocultural theory gave rise to the all-around applications of its tenets in second language pedagogy; consequently, L1 was eulogized to play facilitative roles in second language learning. The history of language teaching is replete with arguments for and against the inclusion of learners' first language (L1) in second language (L2) teaching. Accordingly, the debate has tended to be polarized between these two sides. Scholars in either side of this ongoing debate look at the issue from their own perspectives, and posit their ideas putting forth various claims. Auerbach (1993) posited this debate on L1 use in EFL classes was enigmatic, with controversy arising and subsiding with wavering and varying intensity but never approaching resolution. The enigma, he continued, was that inclusion of L1 had been theoretically justified, verified by research, and pedagogically accepted, while its exclusion had been based on unexamined assumptions (Auerbach, 1993).

Research conducted within the sociocultural theory of learning has been generally the most supportive towards the inclusion of L1 in L2 pedagogy. Contrary to its predecessors such as the interactionist perspectives, Vygotskian sociocultural theory did not deem the presence of target language input as sufficient for learning. Learning, in this regard, is perceived as a social enterprise which is an outcome of collaborative dialogue, or as Cook (2001) put "trying to see the world from the viewpoint of others". Language is

also regarded as a semiotic tool through which human beings can think and convey/comprehend meaning. One such tool, according to Anton and DiCamilla (1999) is L1. It is in studies within the sociocultural tradition, they maintain, that L1 use "as an important semiotic tool is noted". L1 has been claimed to play a crucial role in providing learners with "scaffolded help", through which they might well be able to handle tasks that individually they are unable to complete.

Such a radical shift in views towards L1 use, has sparked a good number of studies, and scholars have recently tried to demonstrate the potential benefits of using L1 in L2 teaching and learning. Studies in this regard can be categorized into three general groups. The first group of studies (de la Campa & Nassaji, 2009; Kraemer, 2006; Macaro, 2001) have investigated the teachers' use of the first language. The results of these studies imply that L1 has undeniable functions in class, a good number of which may play crucial facilitative roles.

The second group, on the other hand, has been dealing with the learners' and teachers' attitudes about first language use (Brooks-Lewis, 2009; Duff & Polio, 1990; Levine, 2003; Macaro, 2001). The majority of these latter studies also suggest that both learners and teachers hold positive attitudes about judicious use of the first language. And more importantly, within a sociocultural perspective, some scholars, to be discussed in the review of the related literature, have focused on learners' use of

the first language in collaborative productive tasks, i.e., writing and speaking skills. These studies, as will be discussed later on in the review of the literature, have investigated the role of L1 use in helping foreign language learners become more efficient L2 speakers and writers. However, there seems to have been few attempts to see how L1 use can help learners improve their L2 reading skills.

Review of the Related Literature

The present study has at its core claim the sociocultural-bound investigation of L1 use in reading tasks; as a result, the review of the related literature is compartmentalized into sociocultural theory, L1 use, reading, and L1 use in reading respectively.

Sociocultural Theory

Cook (2008) posited that “one of the most influential models since the early 1990s has been sociocultural theory (SCT).” In a similar vein, Ellis (2008) stated that “the major theoretical development in SLA since 1994 has been the emergence of ‘sociocultural SLA.’” The embryonic stage for this theory was shaped from the work of Lev Vygotsky, a prominent figure in early Soviet Psychology. Brown (2014) asserted that in the 1990s, momentum built around the social turn in SLA research. He went on to state that sociocultural viewpoints were different from maturational and cognitivist perspectives in that in SCT the focus was on interaction rather than individual learner. SCT also takes language as the quintessential tool for “engaging

in *collaborative* activity in a community of language users” (Brown, 2014). In essence, SCT builds its infrastructure on the psychological theory of human consciousness which was proposed by Vygotsky (Lantolf, 2011). SCT, drawing heavily from the earlier work of Vygotsky (1978) and the shedding of light on it by Lantolf (2000) and later by Lantolf and Thorne (2006) became a “hot topic” (Brown, 2014) in second language acquisition.

The key theme in SCT revolves around the fact that language learning is social mediation between the learner and another person during which socially acquired knowledge internalizes. Another essential theme is that language learning occurs through scaffolding by an expert or a fellow learner (Cook, 2008). In teaching, SCT accentuates the use of what Swain (2000) called “collaborative dialogue” – “dialogue in which speakers are engaged in problem solving and knowledge building”. This takes place in the classroom through structured cooperative tasks. Consequently, it is not the dialogue in the realm of interaction hypothesis in which people are involved in exchanging information i.e., communication, but an educational dialogue in which people create new knowledge i.e., learning. The social context of second language learning is basic to Vygotskian SCT; the theory is predicated upon understanding the significance of interaction between people to form mental activities (Vygotsky, 1978). Two fundamental tenets of Vygotskian SCT are activity theory (Wertsch, 1979, in Lantolf & Thorne, 2006), which reflects

the basic idea that motives for learning in a particular milieu are intertwined with socially and institutionally established beliefs; and mediation, which suggests that human mental activity is mediated by tools and signs, the principal one being language. Regarding activity theory, Lantolf and Thorne (2006) were of the opinion that the “epistemological apparatus of activity theory provides methodologically as well as ethically vigorous tools for use in SLA research and practice and as regards mediation, Lantolf (2000) asserted that, from Vygotsky’s point of view, the mission for psychology was to find out how human social and mental endeavor is shaped via “culturally constructed artifacts and social relationships.”

Pivotal to SCT and mediation is the concept of scaffolding which is social mediation embodying two people. This is carried out by a person who is an expert. Some have expanded the concept of scaffolding to encompass help from people at the same level as the student i.e., fellow students or peers (Ahmadian et al., 2015, 2016; Brown, 2014; Cook, 2008; Khodamoradi, 2013; Mitchell et al., 2013; Wells, 1999).

The most important concept at the heart of SCT is Zone of Proximal Development (henceforth ZPD) which brought about the bulk of research in SCT SLA (Lantolf, 2000, 2007, 2011, 2012; Lantolf & Thorne, 2006; Thorne & Tasker, 2011). ZPD was delineated by Vygotsky (1978) as “the distance between the actual developmental level as determined by independent problem solving

and the level of potential development as determined through problem solving under adult guidance or in *collaboration* with more capable peers.” What can be meant by this, according to Gass (2013), is that learning is the result of interpersonal activity, and it is this interpersonal activity which shapes the infrastructure for individual functioning. This lucidly represents the social nature of learning and accents the significance of “collaborative learning” as it shapes what is learned. Whereas Vygotsky’s original formulation of ZPD was predominantly concerned with interaction between a dilettante and expert, current SCT researchers include pair and group work among peers. Wells (1999), for the purpose of this study-to-be, is worth quoting verbatim: “To learn in the ZPD does not require that there be a designated teacher; *whenever* people *collaborate* in an activity, *each* can assist the others, and *each* can learn from the contribution of others.”

Also important under the aegis of Vygotsky’s (1978) notion of ZPD is his distinction between actual and proximal types of development. According to him while the former deals with the functions that have already blossomed, the latter is concerned with those functions that have not yet matured but, are in the process of maturation, that is, the functions that will mature later, but are currently in their infancy. The gap between actual and proximal types of development, Vygotsky propounded, can be bridged by the presence of scaffolded help. Vygotsky (1986) also interpreted human mental activities as being

first external (inter-psychological) and then becoming internal intra-psychological). In other words, according to him, new knowledge is acquired if it is first dealt with externally either through collaboration with others or self-talk. He also deemed inner speech to be the sign of knowledge appropriation (Lantolf & Thorne, 2006). This clear emphasis on collaborative interaction between learners and/or learners and teachers, in turn, has served as a fresh impetus for many studies to be conducted; and it is interesting that all such studies, to be specifically mentioned in the next section under L1 use, have attributed a crucial role for the learners' L1 in the processes of other collaboration or self-talk.

Under the rubric of SCT and its embedded concepts, ZPD and peer interaction, good many studies have been carried out (Gass, 2013; Lantolf, 2000; Lantolf & Thorne, 2006; Mitchell et al., 2013; Swain et al., 2002; Swain et al., 2011). Since the purpose of this study is L1 use, some of the studies concerned with L1 use particularly will be briefly reviewed in the following section.

L1 Use

There has been an ongoing debate on the role of the learners' first language (L1) in second language learning. There have always been contradicting views about whether to use learners' L1 in EFL classes. The monolingual approach suggests that the target language (L2) ought to be used solely as the medium of communication, implying that the prohibition of L1 would

maximize the effectiveness of learning L2. Authors of some introductory books on EFL teaching do not address this issue or give a cold shoulder to it (Harmer, 1997; Haycraft, 1978; Hubbard et al., 1983).

Although, as mentioned above, there are contradicting views towards the issue of L1 use, more recent publications opting for a sociocultural theoretical lens have friendlier attitudes towards giving L1 a role. In other words, the majority of such studies advocate the use of L1 in language teaching and learning (Ahmadian et al., 2015, 2016; Scott & De la Fuente, 2008; Storch & Aldosari, 2010). They all have a thing in common and that is being influenced by sharing Vygotskian sociocultural framework.

Focusing on the use of L1 in the collaborative interaction of adult learners of Spanish engaged in writing three informative paragraphs, Anton and DiCamilla (1999) found that L1 served "a critical function" when students work in a joint endeavor to work out miscellaneous elements of their task. This was done, they claimed, to keep track of intersubjectivity, which, in turn, helped them to provide each other with scaffolded help, bringing along the externalization of their inner speech. They concluded that the utterances in L1 gave rise to a semantic analysis and related lexical search. This is a communicative and cognitive strategy that propels learners to mutually access those L2 forms that are sufficient in their vicinity. The highlight of their finding is the fact that L1 use as a mediating tool can help the construction of collective scaffolding through which "two

novices”, by means of interaction, can provide scaffolded help to each other (Anton & DiCamilla, 1999).

Observing the collaborative interactions of L2 writers and comparing L1 and L2 collaborations, Ahmadian et al. (2015) expounded that L1 use in collaborative writings, by a large amount, boosted L2 writers' awareness of task management, task clarification and grammar. L1 use, however, as they found, does not have an effect on attention to vocabulary selection and content. The highlight of this study is the fact that, contrary to the good many studies in the literature determined to excavate the why of switching to L1 while writing in L2, this study ventured its trajectory for two groups, L1 and L2 respectively to see how each group approaches the task of writing; as a result, they observed that cognitive overload of writing in L2 was reduced and learners had this serendipitous opportunity to probe other areas of language besides content.

In another study, focusing on the outcome of the writing process and being designed to examine whether giving L1 a role in L2 writing process enhances the quality of written output, Ahmadian et al. (2016) found that the use of L1 could, to a great extent, make L2 writing better in the aspects of “*organization/unity, development, cohesion/coherence, structure and mechanics.*”

As discussed above the role of L1 use in the two language skills of speaking and writing has been well investigated. Reading, on the other hand, has not received due

attention. In other words, few studies have focused on the potential roles L1 can play in reading skill. The following section will be dedicated to studies concerned with L1 use in reading.

L1 Use in Reading

Since the purpose of this study is, generally, the use of L1 in reading, and, particularly, the use of L1 in collaborative reading, the related literature will be briefly reviewed. Cohen (1995), as an instance, surveyed bilingual and multilingual learners on the strategies they used while trying to make meaning of a text and found that shifting to L1 either in the form of explicit translation or inner speech had facilitative functions. Based on verbal report interviews of L2 learners, Kern (1994) had also come up with similar findings. Upton and Lee-Thompson (2001) avered that L1 played a crucial role which was “far beyond merely serving as a linguistic decoder-ring [code-switcher].” Applying think-aloud protocols and retrospective interviews with 20 native speakers of Chinese and Japanese at three levels of language proficiency, they reported that “L2 readers attempted to construct, on an intra-psychological or cognitive plane, a scaffold using their own expertise in their L1 as a means of pushing their L2 competence beyond its current level” (Upton & Lee-Thompson, 2001). Also significant in their findings is that “the overall use and success of calling on the L1 to aid in L2 reading comprehension is clearly determined by the readers' overall L2 proficiency”. Seng and Hashim (2006), studying L1 use in

reading and considering analyses based on think-aloud protocols, found that L1 was used by all the students in the study. As a matter of fact, they specifically came up with the finding that more than thirty percent of the total instance of the strategy use involved L1. The problem with this group of studies is that they all rely on the learners' self-reports and are based on data from think-aloud protocols. However, data collection procedures as such are not free from problems. Therefore, further studies with innovative designs are needed to shed more light on the effects of L1 use in an L2 reading comprehension task.

The present study, therefore, is an attempt to bridge the gap in the literature regarding the absence of studies investigating the attitudes of learners towards L1 use in collaborative reading tasks (CRT). The edge of this research is in fact its focus on the collaborative aspect of the skill since reading has been generally regarded as an individualistic endeavor so far. The study is equally an attempt to investigate the effects of using L1 on learner's reading performance and their attitudes towards CRT while using L1. The following two questions were hence posed for this research:

1. What is the attitude of the learners towards using L1 in CRT?
2. Is there any significant difference between reading scores of readers allowed to use L1 and those allowed to use L2 in a CRT?

MATERIALS AND METHOD

Participants

The study was conducted in a private language institute in Varamin, Iran. To conduct the study, initially, 120 participants were asked to take a placement test. Oxford Placement Test (OPT) was used to determine the general English proficiency level of the participants in the first place and the scores obtained were used to determine group compositions. The paper version of OPT, as can be seen in Table 1, groups test takers based on their proficiency level on a score range of 0-60.

As Table 1 indicates, OPT results can categorize test takers according to their proficiency in English in six groups ranging from beginners to very advanced learners. In order to control the English proficiency variable only learners who scored in the range of 30 to 47 were selected (equivalent to B1 and B2 levels on CEFR). In other words, first, 60 intermediate EFL learners were selected based on the results of the OPT and were randomly put in two groups: L1 group that used the first language to collaborate while doing a reading text and L2 group that used only English as the medium of interactions. The result of the placement test conducted in this phase was therefore only used for participant recruitment and grouping purposes and was not included in the main phase of the study.

Data Collection

After administering a proficiency test to the original sample and assigning them

Table 1

Placement test and its score interpretation

OPT* score range	Level range	CEFR** range
0-17	Beginner	A1
18-29	Elementary	A2
30-39	Lower Intermediate	B1
40-47	Upper Intermediate	B2
48-54	Advanced	C1
54-60	Very Advanced	C2

*Oxford Placement Test

**Common European Framework

to two homogeneous groups (L1 and L2 groups) as was explained above, regarding the first question, all members of the group who used L1 during their collaborative dialogue took a questionnaire. The fact that the questionnaire sought to explore the views of learners regarding the use of L1 in collaborative dialogue obviated the need for learners in L2 groups to respond to it simply because they did not experience using L1 in their collaborations.

As for the second research question, after an orientation session, learners were accommodated in two separate classes. Learners in both classes took the reading section of a TOEFL iBT as the pretest. Since all the recruited participants based on the results of the preliminary placement test were in the intermediate English proficiency range, the TOEFL iBT reading section was considered appropriate for their level. Next, in one of the classes, hereafter referred to as the L1 class, learners used only L1 in collaborative reading tasks for seven sessions, whereas in the second class, referred to as L2 class, the normal course of

the action went on, i.e. learners used L2 as the medium of interaction while engaged in CRT. In the ninth session, all learners took a post-test which was taken from the reading section of a TOEFL iBT. Then, independent samples t-test was used in order to compare the scores obtained from the post-tests.

The idea for having a collaborative approach towards doing the reading tasks originated from research on sociocultural theory. Collaboration is a central concept in this theory and it is believed that learning originates from collaboration on an inter-psychological phase. It is only after this phase that learning can be internalized and find its way into the intra-psychological phase. As reviewed in the literature, however, little attention seems to have been paid to collaboration in reading. This study has taken Swain's (2000) definition of collaborative dialogue as the basis for treating reading as a collaborative task. She argued that collaborative dialogue was any "dialogue in which speakers are engaged in problem solving and knowledge building." CRT was therefore operationalized in this

study in the form of a reading task done by a group of language learners who verbalized their thoughts while doing the task. They were encouraged to talk to each other about different aspects of the reading task, both the text itself and the questions that came after it, and share their background knowledge and lived experiences to solve their comprehension problems collaboratively. The only difference between the two groups of learners in this study was that while the L1 groups were allowed to use their first language in their collaborations and were encouraged to do so by the researchers during the reading tasks, the L2 groups were only allowed to use English in their collaborations.

The majority of research on the thinking processes involved while reading in a second language has used think-aloud protocols as data collection instrument (Seng & Hashim, 2006). In this protocol, learners are asked to verbalize what they think so that researchers can monitor their thinking process. This is not free from criticism, however. Learners may provide a partial account of their thinking process. What is more, talking about what one thinks imposes a heavy cognitive burden thereby limiting one's cognitive abilities. Collaborations, on the other hand, are more natural than thinking aloud. That is why collaborative reading tasks were used in this study to monitor the use of L1 by the learners. The argument is that L1 may be used by learners doing a reading task by themselves. Yet, since access to what they think at the time of doing the task is partial, collaborative dialogue can

serve as a better tool for making learners' thoughts hearable. In the experimental sessions, therefore, L1 group learners were encouraged to discuss the text in whatever language they felt more comfortable with to maximize their collaborations. The researchers monitored them and their interactions were recorded as well. The L2 groups, as mentioned above, were limited to the use of English, however.

RESULTS

The First Research Question

The first research question dealt with the attitudes of the learners in the L1 class who used their first language while engaged in CRT. The questionnaire comprised 15 Likert scale items. However, since all the 15 items measured one dimension, they were first computed by IBM SPSS Statistics for Windows, version 19.00. The following table summarizes the results of the descriptive analyses of the questionnaire data.

As Table 2 shows, a third of the participants held favorable attitudes towards using L1 in CRT. 63% of the learners, nonetheless, took a neutral posture regarding the questions. The remaining three percent (one of the learners), however, took issue with the use of L1 in CRT. Overall, the data seem to imply that the majority of the participants in the L1 class did not feature disagreement with the use of their mother tongue while interacting with their peers to comprehend a passage in English.

Table 2

Descriptive analysis of the attitudes of learners in the L1 class

	Frequency	Percent	Valid Percent	Cumulative Percent
Agree	10	33.3	33.3	33.3
Neutral	19	63.3	63.3	96.7
Disagree	1	3.3	3.3	100.0
Total	30	100.0	100.0	

The Second Research Question

The second question entailed a comparison between the scores obtained from the post-tests by the two groups of learners. However, before running independent samples t-test for the purpose of a comparison as such, Levene's test of homogeneity of variances was necessary. In fact, as a prerequisite for running t-tests, the variances of the scores of the two groups need to be similar. The following table shows the result of this test for the post-test data collected from the participants in this study.

As stated above in Table 3, variances of the scores of the two groups should be homogeneous and not significantly different. In other words, there should be a negligible difference between the variances for the data from two groups to be comparable. What the test in Table 3 shows is that the f value is above the cutoff point of 0.05 (0.125). This, in turn, means that although the variances are different, the difference between them is negligible. That is to say, the variances are homogeneous. The following ANOVA test examines the same issue for the observed difference between the mean scores of the two groups.

As Table 4 indicates, the ANOVA f value is suggesting that there is no significant

mean difference between the two groups because the p value is above 0.05 (0.063) and is hence not significant.

Now that the condition for running a t-test is met, it can be used to see whether the observed difference between the scores obtained by the learners in the two classes were significant. The following tables summarize the scores obtained by the participants in the two groups and after that the results of the t-test comparing their mean scores.

Table 5 testifies the fact that the mean score obtained by the learners in the L1 group was slightly more than the one obtained by their peers in the L2 group. In other words, the learners in the L1 group scored 19.46 out of 30 on average, while in the other group the learners scored 18.43. In order to decide whether this observed difference has been significant, an independent samples t-test was run, the results of which can be seen in Table 6.

As the results of the independent samples t-test in Table 6 show, since the p value (0.063) is above 0.05, the observed difference between the scores of the two groups in the post-test cannot be regarded as significant. In other words, this means that although the L1 class scored slightly

Table 3

Levene's test of homogeneity

Levene Statistic	df1	df2	Sig.
2.417	1	58	0.125

Table 4

ANOVA test for determining the significance of Levene's statistic

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	16.017	1	16.017	3.589	0.063
Within Groups	258.833	58	4.463		
Total	274.850	59			

Table 5

Descriptive comparison of the scores obtained by L1 and L2 groups

	Language	N	Mean	Std. Deviation	Std. Error Mean
Score	L1	30	19.4667	1.83328	0.33471
	L2	30	18.4333	2.35889	0.43067

Table 6

Independent samples t-test for comparing the results of the two groups

		T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						Lower	Upper	
Score	Equal variances assumed	1.894	58	0.063	1.03333	0.54544	-.05849	2.12516
	Equal variances not assumed	1.894	54.668	0.063	1.03333	0.54544	-.05991	2.12658

higher than the L2 class on average, their performance was not significantly better than that of their peers who did not use L1 in their collaborations.

DISCUSSION

The present study was intent on investigating the attitudes of EFL learners towards the use of their L1 while engaged in CRT and the potential effects of using the L1 on

their reading in the second language. For long, the debate has tended to be polarized between those who have been in favor of using L1 and those who have been against it. With the advent of sociocultural theory this chasm has not widened any further not the least due to the scaffolding feature attributed to L1 use. Sociocultural theory constitutes evidence in favor of mediation as a contributing element in collaborative tasks. This having said, there have been a number of studies, as mentioned in the review of literature, which supported the idea of mediation in respect of sociocultural theory arguing that L1 use can both facilitate mediation and act as a salient factor in the ZPD of EFL learners. Nevertheless, there has been no unanimous consensus in the fact that L1 use has a facilitating role in the betterment of language skills, especially in the reading skill. Now, looking at the results of the present study in retrospect, one could argue that there are two areas where the results feature both similarities and differences with what the existing literature on L1 use in L2 reading has to offer: facilitation in L2 acquisition through L1 use and learners' attitudes towards giving their L1 a role in the process of L2 learning.

As far as the former of the two aspects is concerned, although this study implies that L1 use may have a positive impact on L2 acquisition, it does so with caution since the observed difference between the performance of the learners who were allowed to use L1 and that of the learners who used L2 exclusively in their collaborations was not statistically significant. This stands

opposite to what the proponents of L1 use in the acquisition of L2 reading skill have to say. For example, Kern (1994) and Cohen (1995) argued that using L1 in the forms of explicit translation or inner speech had a facilitative role in learning a second language. Although this bears resemblance to the findings of the present study in that holding a positive attitude towards L1 use can contribute to the enhancement of the reading skill, the authors of the present study do not share with these researchers their complete support for L1 use. As another example, Upton and Lee-Thompson (2001) put forward the idea that L2 readers made endeavors to build a scaffold intrapsychologically or cognitively using their expertise in L1 which allowed them to perform tasks that would be above their potentiality otherwise. Seng and Hashim (2006) also used data collected via think-aloud protocol and self-reports to investigate the use of L1 based strategies by their participants and found that thirty percent of the strategies employed by learners in reading was allocated to L1 use. Once again, despite the findings of the abovementioned studies, the current research plods cautiously along the proposition that L1 has a definite facilitative role in CRT. As it is patently manifest in Table 6, the observed difference between the mean scores of the two groups in this study was not statistically significant. The result can corroborate the fact that L1 use has an effect but not to the extent that it can be deemed significant.

As far as the attitudes of the participants in this study towards L1 use in CRT are

concerned, one has to approach the results and draw conclusions with more caution. As mentioned earlier on in the results section of this paper, participants in the L1 groups did not have a negative attitude towards L1 use. Yet, while around 33% of them said that they had a positive attitude towards L1 use, more than 63% reported a neutral feeling. In other words, the majority of the participants in this study felt neither good nor bad about the use of L1. Moreover, to the best of the authors' knowledge very little has been published on the use of L1 in reading tasks, which makes comparisons between the results of this research and those of other similar studies difficult. Yet, the mixed results of this study, i.e. positive and neutral views towards L1 use, bear resemblance to what we already know. There seem to be contradictory results as far as attitudes of learners and teachers towards L1 use in EFL are concerned (Nazary, 2008). Obviously, issues such as the context of study and proficiency level of learners might influence research results. Prodromou (2002) for instance, argued that learners with lower proficiency levels benefited more from L1 use and therefore had positive attitudes towards it. Indeed, such variables play important roles. But as it has been often stated in the literature, the use of L1 in EFL can be politically and socially sensitive (Phillipson, 2009). This implies that whether or not learners and teachers develop and maintain positive attitudes towards L1 use can be dependent on the sociopolitical environment of the classroom as well as the influence of media and popular culture. Yaqubi and

Pouromid (2013), as a case in point, having researched attitudes towards L1 use in an Iranian context, concluded that an intricate web of variables including the views of stakeholders of language teaching other than learners and teachers influenced the beliefs and attitudes towards L1 use as well as the amount teachers and learners may actually use it in the classroom. Investigating such sociopolitical issues around L1 use has been beyond the scope of the present study, but it is for sure an important issue and future research is hoped to shine more light on it. However, the mixed attitudes of learners towards L1 use in this study can be interpreted through such a sociopolitical lens as well. That is to say, the present study takes side with the authors mentioned in this section who believe that attitude is not necessary a personal construct and can instead be formed and shaped based on the context in which individuals are residing.

Another issue worth mentioning is the type of task used in the experimental sessions in this study as CRT. What the authors of the present study suggest is more about an approach towards reading tasks and less about the specifics of the task itself. During the experimental sessions and in the pre- and post-tests, learners were encouraged to interact and tell each other what they thought about the different aspects of the task. The theoretical logic behind this was to evaluate the extent to which sharing background information and lived experiences would influence learner attitudes and achievement. What is largely neglected here is the potential

influence of the task type. In other words, while in this study traditional reading tasks were used, the use of tasks and activities specifically designed for collaborative work might change the results. A reading task, for instance, that assigns different roles and responsibilities, such as summarizing, paraphrasing, taking notes about main ideas, to each member in a group might be more suitable for collaborative endeavors. However, a glance through published materials on reading activities reveals that most tasks, if not all, are designed for individual learners. Future research can also teach us more about the effects of using L1 during specifically designed collaborative tasks on the perceptions and achievement of learners.

CONCLUSION

In conclusion, this study takes issue with the unsupported logic that monolingual policy proponents put forward. It seems that L1 has the potential to push the learners beyond their L2 performance. In light of the findings of this research, there is no gainsaying the fact that L1 can be used to enhance the effectiveness of developing language skills, especially the reading skill. However, one cannot be adamant in the belief that the rampant use of L1 can play a concrete facilitative role in CRT as the current research shows thanks to the findings patently obvious in the results section. This could be noteworthy for policy makers in the higher echelon of power not to disregard L1 use completely, at the same time not accentuating the fact that L1 use

can have the final say in CRT. As such, syllabus designers and teacher trainers cannot put all the eggs in L1 use basket. It is high time they considered the moderate use of L1 in EFL settings as L2 can still be pleasantly regarded as a facilitating factor vis a vis L1 use. This could eliminate the bias harbored in both poles. One can hope that by expunging these extreme poles, EFL can see a rosy future down the road.

Considering the fact that the use of L1 in collaborative reading tasks has largely remained unstudied so far, a number of suggestions for further research can be proposed. First of all, as mentioned above, the effect of task type and task variation can be studied in CRTs where learners are allowed to use their L1. Not all task types can be expected to elicit the same response in learners. While L1 use may suit certain tasks, it may fail to do so for other ones. Second, learners' attitudes need to be studied with regards to the context of the study as well as their interrelationship with the attitudes of other stakeholders in language teaching such as teachers. Furthermore, it is also worth examining whether different stakeholders exert any influence on each other's attitudes towards L1 use. Finally, the correlation between attitude and performance can also offer good insights. The idea is in fact whether or not having a positive attitude towards L1 use ends up in better performance in CRT by L2 learners. The results of research as such can hopefully inform L2 acquisition research on a theoretical level. More importantly, it can provide syllabus designers and

materials developers by providing them with insights into the process of L2 reading comprehension that can be used to put up syllabi that yield more accountable results than before. Carpe diem!

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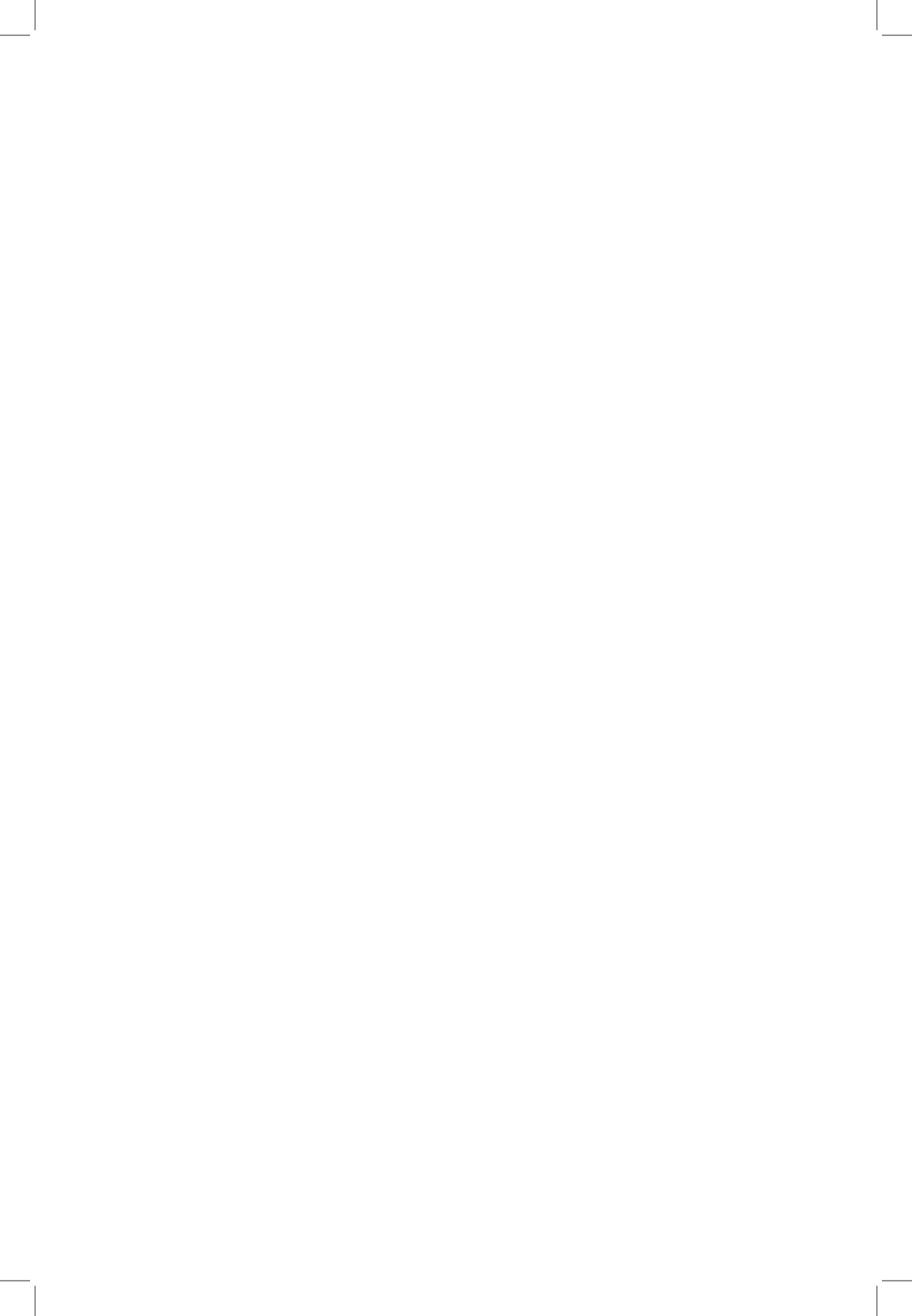
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Acquisition of English Relative Clauses by Malaysian L1 Tamil Speakers

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ABSTRACT

This study investigated the acquisition of English Relative Clauses (RCs) by Malaysian L1 Tamil speakers of L2 English based on the Failed Functional Features Hypothesis (FFFH). The aim was to find out if the Tamil speakers were capable of resetting the parameter of Tamil RCs into the English RC settings. The formation of RCs in both English and Tamil involves *wh*-movement. However, Tamil also allows the non-movement option which is considered ungrammatical in English. Specifically, the study investigated the development of English RC acquisition among three different proficiency groups of L1 Tamil learners who were selected based on the Oxford Placement Test 2. Data was gathered from 145 students via a Grammaticality Judgement Test. The results showed that the ability of the participants to accept grammatical items was better than their ability to reject ungrammatical items. The results also showed that if two options of a parameter were available in the L1, then one would be the default, and this tended to be carried over to the L2 acquisition

process. Thus, the findings showed that the participants' L2 grammar seemed to lack the functional features involved in English RC formation, which were not accessible after the critical period, supporting the FFFH.

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INTRODUCTION

The acquisition of English relative clauses (RC) has often been problematic for ESL (English as second language) learners, especially L1 speakers of other languages whose RC structure differs from the English structure. This group would include L1 Tamil speakers since there is a difference in RC formation between the two languages. In our case, the participants are rural secondary school and post high school adult Malaysian L1 Tamil speakers. A number of studies on the acquisition of RCs in child grammars among speakers of European languages and Tamil have been carried out (e.g. Bai, 1989; Flynn & Lust, 1980; Goodluck & Tavakolian, 1982; Hamburger & Crain, 1982; Labelle, 1990, 1996; Lebeaux, 1990; Nirmala, 1980; Sheldon, 1974 as stated in Lakshmanan, 2000). Studies on the L2 acquisition of English RCs have also been conducted (see e.g. Hawkins & Chan, 1997; Wong, 2002). However, very few studies have been conducted on the acquisition of English RCs by subjects whose L1 is Tamil (Lakshmanan, 2000). Previous published studies on the acquisition of Tamil RCs among L1 Tamil speakers were carried out by Lakshmanan (2000), Bai (1989) and Nirmala (1980). However, no studies have been reported on the acquisition of English RCs by L1 Tamil speakers in Malaysia. The present study addresses this gap in the literature by investigating the capability of Malaysian L1 Tamil speakers in the acquisition of English RCs. In addition, the anticipated staged development of the acquisition of English RCs among

the participants may have a pedagogic significance in that it may provide a practical justification for letting the younger learners be taught the less complex RCs before they are exposed to and taught the more complex RCs. Further, the findings of the study will enrich one's understanding of the reasons for the difficulties faced by the L1 Tamil speakers of L2 English in constructing RCs and will provide insights into ways to overcome the problem.

The focus of the study is to find out if L1 Tamil speakers of different levels of proficiency can reset the parameter (see Mitchell & Myles, 2004) of the Tamil RC setting into the English RC setting. In this paper, we report quantitative data which shows that with increased proficiency in the L2 (English), the L1 Tamil speakers do become more competent in English RC acquisition involving short movement (SM) and long movement (LM) although not native like even at the advanced stage. Next, we provide evidence that this could be due to the fact that some grammatical categories which have been acquired in the L1, cannot be altered after the ¹critical period due to associated functional properties in the corresponding L2 categories being

¹ critical period –“Parameterized functional features are subject to a critical period. When this is past, learners no longer have access to the ‘virtual, unspecified features’ that constitute UG but only to how these features are encoded in the lexical entries of their L1. These assumptions serve as the basis for claiming that (1) the main difference between L1 and L2 learners lies in the properties of the input that they can assimilate into their mental grammars, and (2) that when the critical period is past learners are unable to assimilate features from the input unless they are also instantiated in some form in their L1.” (Ellis, 2012).

not operative in the learners' L1. In the concluding section, we argue that although Tamil allows for both +wh-movement and non-wh-movement in RC formation, the L1 Tamil learners seemed to have adopted the non-movement option as the default. This would be in line with the proposal put forth by Hawkins and Chan (1997) that stated the features that were associated with functional categories that had not been instantiated in a speaker's L1 might not be acquired after a critical period (e.g. Smith & Tsimpli, 1995; Tsimpli, & Roussou, 1991; Tsimpli & Smith, 1991).

Linguistic Assumptions

Relative Clause in English. In English the relative clause (RC) acts as the post modifier to the Noun Phrase (NP) (the matrix clause precedes the RC). The formation of RC involves movement of the *wh*-phrase to the specifier position of the Complementizer Phrase (CP) in the embedded clause and this movement leaves a trace in the position from which it has been moved out (e.g. Wong, 1999). This trace is the original site of the *wh*-pronoun which the clause is identifying; the head noun of the whole NP determines its reference. The examples below which are adapted from Wong (1999) exemplify this:

Example 1:

- a) The television_i [CP Ø [I bought wh_{-i}]] is expensive.
- b) The television_i [which_i Ø [I bought t_i]] is expensive.

The trace is coindexed with the fronted *wh*-phrase which is bounded by the operator and forms an A' chain with the operator (Roberts, 1997). *Wh*-movement is subject to constraints discussed in Ross (1967, cited in Roberts, 1997). The constraints are called islands (see examples 2(a & b)).

Example 2 (adapted from Wong, 1999):

- a) *²The play [CP₁ which_i Ø [³IP I believe [DP the claim [CP₂ t_i' Ø [IP₂ she had commented on t_i]]]]] is Beauty and the Beast.
- b) *[CP₁ Who_i were [IP₁ you wondering [CP₂ how_j [IP₂ t_i should fix the piano t_j]]]]]?

Ross (1986, cited in Roberts, 1997) noted the Complex Noun Phrase (CNP) constraint where no elements contained in a sentence dominated by a noun phrase (NP), now reanalyzed as DP⁴, may be moved out of that DP. Example 2(a) illustrates a DP which contains an RC and that an extraction from the RC out of the DP is prohibited as DP is an island (Roberts, 1997). Example 2(b) is an instance of a *wh*-island. *Wh*-islands are clauses introduced by *wh*-phrases. Extracting a *wh*-element from a *wh*-island will lead to ungrammaticality (Roberts, 1997). There are boundaries on movement that determine how far an element can be moved. This constraint on the distance of movement is known as the Subjacency condition. Movement cannot cross more than one bounding node, when

2 * - ungrammatical
3 IP - Inflectional Phrase
4 DP - Determiner Phrase

bounding nodes are IP and NP (Haegeman, 1997). In example 2(b) above, *who* crosses both IP₂ and IP₁ in a single movement and Subjacency rules this out.

Another principle, the Empty Category Principle (ECP) deems that all traces must be properly governed. ECP states that non-pronominal empty category must be:

- a. governed by a lexical head (lexical government)
- b. governed by the moved category (antecedent government) (Roberts, 1997)

In 2(b), the subject trace is neither properly head governed nor antecedent governed. It is impossible to perceive this because the traces fail the ECP since they are neither lexically governed nor antecedent governed (Wong, 1999).

Relative Clause in Tamil

Subjects and verbs in Tamil are richly inflected for agreement (person, number and gender). The canonical word order of Tamil is Subject Object Verb (SOV). Thus, Tamil is a head last language (Lakshmanan, 2000). Unlike English, the Tamil RC acts as the pre-modifier of the NP, i.e. it precedes the matrix clause.

There are three types of RCs in Tamil: correlative, participial and tag. The participial RC is the typical mode of relativization in Tamil, and this occurs in both colloquial and formal varieties of Tamil. The Tag RC is found mainly in the colloquial variety while the correlative RC is mainly found in literary Tamil and it rarely occurs in the former (Lakshmanan, 2000).

Since Tamil participial RCs (+*wh*) and tag RCs (-*wh*) are directly related to the study, examples of both are provided here. Tamil also makes use of rich ⁵case distinctions. The participial RC, also known as adjectival RC, consists of a head noun which is represented as zero in the RC, i.e. it is not overtly expressed. The following is an example of participial RC.

Example 3 (Lakshmanan, 2000):

[NP[S *neettikki inke va -nt-a*]
[*paiyan-ai*]] *naan innikki paar-tt-een*
yesterday here come-⁶Pst-RP boy-⁷Acc
I-Nom today see-Pst-1PS

Today I saw the boy who came here yesterday.

Example (3) clearly shows that the participial RC precedes the head noun and there is no overt complementizer in this RC. The verb in this RC type takes the Relative Participial (RP) ‘*a*’ (see Kothandaraman, 1972; Mohiddin, 1976) as seen in the verb *va-nt-a* (*came*). The participial RC, [NP[S *neettikki inke va-nt-a*], along with the nominal head, [*paiyan-ai*]], forms the NP constituent. Hence the RC moves along with the nominal head. The formation of participial RC could be analysed in two possible ways based on the facts that:

- i) there is a NP gap present in the participial RC at the surface level

5 Nominative case, which is the case typically borne by the subject of a clause, is morphologically unmarked. The Accusative case marker -ai, marks the direct object of the verb and the Dative case marker -ukku is borne by the indirect object. Other overt case forms include the locative, instrumental, sociative, ablative, genitive, and benefactive.

6 Pst - past

7 Acc - accusative

- b) **siittaa enke santi-tta-al enru raman-uku*
 Sita-Nom where meet-Pst-3PSFem¹⁰
 C Raman-Dat¹¹
nyapakam va-nt-a paiyan
 remembrance-Nom come-Pst-RP
 boy-Nom
 The boy who Raman remembered
 where Sita met...

- c) **siitta kalyanam pannikka virumbu-kir-a sankiti-y-ai patri*
 Sita-Nom marriage do-¹²Inf wish-
 Pres-RP news-Acc about
naan kee-tt-a paiyan
 I-Nom hear-Pst-RP boy-Nom
 The boy who I heard about the news
 that Sita wishes to marry...

In contrast to participial RC, the tag RC does not involve *wh*-movement (Lakshmanan, 2000). The tag RC consists of a verb richly inflected for both tense and agreement. The verb takes an overt clitic complementizer *ee* which is appended to the end of the verb. The complementizer functions as a connector of the RC and the nominal head. The speaker assumes that the hearer knows about the incident or the subject that is being discussed. The clitic complementizer always expresses an actual or factual event but not a hypothetical event (see Example 6).

Example 6 (Lehmann, 1993):

[NP[S *netru oru paiyan inke va-nt-aan-ee*] [NP *anta*
 yesterday a boy here come-Pst-3PSMasc-¹³Cc that
paiyan-ai]] *naan inru paar-tt-en*
 boy -Acc I today see-Pst-IPS
 Today I saw the boy who came here
 yesterday.

In the phrase *netru oru paiyan inke va-nt-aan-ee* (the boy who came here yesterday), the clitic complementizer *ee* tells us that the hearer knows that the boy came here yesterday and that the event is factual and not hypothetical. The head NP of the RC is represented by an overt NP in the RC, the NP *oru paiyan*. The NP is coreferential with the head noun *anta paiyanai*. The NP in the RC is not overtly expressed as shown in Example 6. No element can be scrambled between the tag RC and the nominal head that immediately follows the RC; it is assumed that the RC and the nominal head together form the NP constituent. Hence the nominal head and the RC cannot be separated. The nominal head moves along with the RC (Lakshmanan, 2000). The attributes of the tag RC explain the fact that the nominal head and the RC are inseparable as illustrated in Examples 7 (a-c):

10 3PSFem-third person singular feminine
 11 Dat-dative
 12 Inf- infinitive

Example 7:

13 Cc- clitic complementizer

(a) [NP[Snetru oru paiyan inke va-nt-aan-ee]
 yesterday a boy here come-Pst-3PSMasc-Cc
 [NP anta paiyan-ai]] naan inru paar-tt-en
 that boy-Acc I today see-Pst-1PS
 Today I saw the boy who came here yesterday.

The NP representing the head NP in the RC is moved over the finite verb + clitic *-ee* by a stylistic movement transformation as in the following example:

(b) [[netru inke va-nt-aan-ee oru paiyan] [anta
 yesterday here come-Pst-3PSMasc-Cc
 a boy that
 paiyan-ai]] naan inru paar-tt-en
 boy -Acc I today see-Pst-1PS
 Today I saw the boy who came here yesterday.

Another attribute of tag RC is that the head NP in the RC can be deleted as in 7(c) (Lehmann, 1993):

(c) [[netru inke va-nt-aan-ee]
 [anta paiyan-ai]]
 yesterday here come-Pst-3PSMasc-Cc
 that boy-Acc
 naan inru paar-tt-en
 I today see-Pst-1PS
 Today I saw the boy who came here yesterday.

Examples 7a-c provide evidence that the NP in the RC moves along with the nominal head. The main verb *va-nt-aan-ee* consists of the pronoun *avan* (he) *vanta+avan* (came + he) resembling the nominal head and this explains why the head NP in the RC can be deleted without any semantic deviation.

The following figure is the phrase marker of the tag RC in Example 7c. As shown in Figure 2, the tag/affixal RC does not appear to involve the movement of a null Operator. Instead, a null Operator is simply base generated in SPEC of CP. The relativization site within the RC is typically occupied by the phonologically null element *pro*, which is the unmarked option coindexed with the null Operator and the nominal head (the subject of predication (Lakshmanan, 2000)). The construction

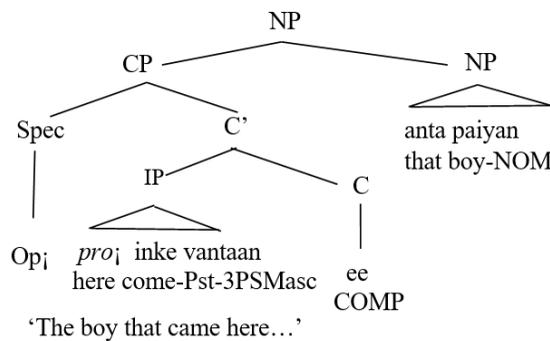


Figure 2. Phrase marker of the tag relative clause structure (Lakshmanan, 2000).

of the tag RC reveals that it is not derived from *wh*-movement as it is not subject to island constraints and permits long distance relativization from complex NPs and *wh*-clauses. Tag RCs also do not exhibit cross over effects. Examples 8 (a-c) illustrate this: Example 8 (Lakshmanan, 2000):

(a) *sita neesi-kkir-aal enra*
sankkiti-y-ai naan
 Sita-Nom love-Pres-3PSFem that news
 -Acc I-Nom
kee-tt-en-ee anta paiyan
 hear-Pst-1PS-Cc that boy-Nom
 The boy who I heard the news that Sita
 loves...

(b) *en-akku sita enke santi-tt-aal*
enru
 I-Dat Sita-Nom where meet-Pst-
 3PSFem that
nyapakam va-nt-at-ee
anta paiyan
 remembrance-Nom come-Past-3PSN-Cc
 that boy-Nom
 The boy who I remembered where Sita
 met...

(c) *sita kalyanam pannikka virumbu-*
kir-a sankkiti-y-ai
 Sita-Nom marriage do-Inf wish-Pres-
 RP news-Acc
patri naan kee-tt-en-ee anta
paiyan
 about I-Nom hear-Pst-1PS-Cc that boy-
 Nom
 The boy who I heard about the news that
 Sita wishes to marry...

The examples in 8 (a-c) are all grammatical providing evidence that the tag RC, unlike the participial RC does not involve *wh*-movement (Lakshmanan, 2000).

MATERIALS AND METHODS

Participants

The participants of this study were secondary school students (aged between 13 and 18) and post-secondary adults (pre-university and undergraduates). A total of 145 participants were selected based on pre-set criteria, i.e. they must use Tamil as their medium of communication at home and had received primary education in rural Tamil schools and secondary education in rural national schools (participants were selected from rural areas to ensure that younger participants are true L1 Tamil speakers). A participant selection form was used to select participants with these criteria. They were divided into three proficiency levels based on the Oxford Placement Test (OPT) Pack 2, (Allan, 2004) i.e. Elementary (E), Intermediate (I) and Advanced (A). In total, ninety-eight (98) elementary level, 22 Intermediate level, and 25 advanced level participants were selected for the study. Before the commencement of the study, consent was obtained for experimentation with the participants.

Materials and Procedures

A Grammaticality Judgement Test (GJT) was used to measure the participants' capability in identifying the grammatically correct and incorrect English RCs involving

short movement (SM) and long movement (LM). The GJT consisted of a total of 96 items, of which 48 items were grammatically correct and another 48 grammatically incorrect (adapted from Hawkins & Chan, 1997; Wong, 1999). The even distribution of items tested ensured elicitation of the participants' understanding of English RCs. The distribution of items was as follows: extraction from both short and long movement with 8 involving extraction of subject (4 active and 4 passive), 4 involving extraction of direct object, 4 involving extraction of prepositional object, 4 involving extraction of genitive object, subject and prepositional object and 4 involving extraction of object of comparison. The 96 items in the GJT were randomly arranged to avoid metalinguistic focus on the part of the participants.

A pilot study involving 140 participants selected based on the set criteria (90 participants aged between 13 and 18 and 50 pre-university and undergraduates) was carried out to test the reliability of the instruments used in this study. The items in the GJT were analyzed for internal consistency using Cronbach Alpha (CA) and those items with low readings were rewritten. During the test, the participants received no assistance from both the researcher and their English language teachers. The participants were allowed to use a vocabulary list comprising selected words from the test that were translated into the participants' L1. The data collected from the GJT were analyzed using SPSS (version 16). The scoring of the GJT was adapted from Wong (1999).

For the grammatical items, the scales are (1) Definitely Acceptable, (2) Probably Acceptable, (3) Probably Unacceptable and (4) Definitely Unacceptable. Responses (1) and (2) were considered correct responses for grammatical items while responses (3) and (4) were accepted as correct answers for the ungrammatical items. In the case where the participants reverse the responses, i.e. when they provided responses of (3) or (4) for the grammatical items and (1) or (2) for the ungrammatical items, then their judgement would be deemed incorrect. Items with no response were placed under the category of incorrect judgement. The items were read one at a time with careful intonation, stress and rhythm. A nine second interval was given between items, following past studies (see Hawkins & Chan, 1997; Wong, 1999).

The results of this test would inform us whether the participants have the competence to identify and distinguish the grammatical from the ungrammatical English RCs. A post hoc test was done on the GJT scores to compare the significant difference(s) in each set of the items among the three proficiency levels. The results would reveal whether the participants had acquired English RCs in stages as documented in past second language acquisition (SLA) studies on RCs (Wong, 1999, 2002).

RESULTS AND DISCUSSION

Table 1 summarizes the data obtained from the GJT that registered significant differences among the three proficiency levels.

Table 1

Summary of the comparison of mean scores of GJT

Items	Elementary (%)	Intermediate (%)	Advanced (%)	SD	df	F value	p value
Total GJT scores	59.79	63.00	68.75	16.27	2	13.80	0.000*
Total Grammatical	61.80	64.23	70.83	11.94	2	13.80	0.000*
Total Ungrammatical	47.91	52.23	56.16	13.68	2	7.76	0.001*
Total SM	63.52	64.26	79.94	7.47	2	14.56	<0.001*
Total LM	61.19	64.19	67.77	6.31	2	6.39	0.002*

* significant at $p \leq 0.05$

The results of the GJT scores between proficiency levels showed that there is an incremental trend from the Elementary to the Advanced level for all the RC types providing evidence that with increased proficiency, the ability of the participants to accept grammatical English RCs also increases. However, the mean scores in percentages showed that even at the Advanced level, the participants' ability to accept English RCs is not near native like, i.e. 68.75%. The score for the grammatical items is 70.83% and for the ungrammatical items, 56.16%. All the mean scores are below 80%. Items involving SM and LM also show similar results. The mean score for the SM items is 79.94% and for the LM items, 67.77%. The scores of the ungrammatical items are even lower although there is a significant difference in the mean scores ($p=0.001$, $SD=13.68$) attained by the three proficiency levels. In fact, the mean scores for ungrammatical English RCs are at chance level.

The results here show that the participants' underlying knowledge regarding English RC formation, especially at the Elementary level, is not native like (overall mean = 59.79%; mean of grammatical items = 61.80%; mean of ungrammatical items = 47.91%; mean of SM items = 63.52%; mean of LM items = 61.19%). Taken together the results suggest that the participants' level of acceptance of the grammatical items is better than rejection of ungrammatical items, an indication that their intuition of the items is evidently non-native like. Native speakers would generally be able to judge grammatical items as grammatical and to reject ungrammatical items to more or less equal levels.

The results of the grammatical RCs in the GJT (see Table 2) show a steady increase from the Elementary to the Intermediate and to the Advanced level. Generally, the participants' performance showed that the easiest RCs to acquire are those involving extraction of the subject (both active and

passive) (Advanced level: SM subject active (act) = 81.66%; SM subject passive (pas) = 87.66%). However, there is no significant difference in the scores between proficiency levels involving the extraction of both the RC types for the three proficiency levels at $p=0.131$, $SD=2.37$ (SM subject act) and $p= 0.059$, $SD=2.23$ (SM subject pas) respectively.

The scores reported for subject and direct object (direct obj) relatives (84.66%) show that these are the easiest for the Advanced level group to judge compared to genitive (65.66%, A) and object of comparison (obj of comp) relatives (64.00%, A). The Elementary level participants performed almost to native like level

for both the SM subject relatives (act = 76.58%, pas = 79%) while the Intermediate (85.16%) and Advanced proficiency level participants (81.66%) were native like in their performance in judging the SM subject act (based on 80% cut-off point for native like competence (see Wong, 1999, 2002)). This indicates that RCs involving SM especially those involving extraction of the subject is easier to judge. Hence all the participants performed to a satisfactory level with no significant differences in their scores. In the case of RCs involving LM extraction of subject (pas) the participants' scores were almost similar i.e. below 70% (64.16%, E; 68.91%, I and 69.33%, A).

Table 2

Summary of the comparison of mean scores of types of grammatical RCs in the GJT between the proficiency levels

RC type	Elementary (%)	Intermediate (%)	Advanced (%)	SD	Df	F value	p value
SM subject (act)	76.58	85.16	81.66	2.37	2	2.05	0.131
SM subject (pas)	79.00	75.75	87.66	2.23	2	2.884	0.059
SM direct obj	67.41	71.16	84.66	2.84	2	5.59	0.005*
SM obj of prep	54.83	46.58	60.66	2.92	2	1.998	0.139
SM genitive	51.66	55.25	65.66	1.96	2	7.94	0.001*
SM obj of comp	49.58	54.50	64.00	2.52	2	4.95	0.008*
LM subject (act)	73.33	79.91	86.66	2.20	2	6.01	0.003*
LM subject (pas)	64.16	68.91	69.33	2.17	2	1.189	0.307
LM direct obj	66.83	74.16	83.00	2.07	2	10.43	0.000*
LM obj of prep	51.33	43.50	44.00	2.64	2	1.895	0.154
LM genitive	51.58	57.50	56.00	2.16	2	1.328	0.268
LM obj of comp	59.75	60.91	67.66	2.24	2	1.800	0.169

* significant at $p \leq 0.05$

The results also showed that the participants had difficulty judging items involving SM extraction of obj of comp and LM extraction involving obj of preposition (obj of prep). Further, a Bonferroni post hoc test registered a significant difference on the scores of SM extraction of obj of comp between the Elementary and Advanced levels ($p=0.007$). With regard to items involving LM with extraction of genitive, the Intermediate level participants did slightly better (57.50%, I) than the other two proficiency levels (51.58%, E; 56.00%, A) although the result was not significant. This showed that the participants' difficulty in acquiring this type of RC was almost at a similar level. Although the scores are not native like, they are interesting as they showed that an increase in proficiency is necessary to understand and acquire the embedding process in RCs involving LM.

The mean scores in percentages of the ungrammatical RC types (see Table 3) showed that the Advanced proficiency level participants did significantly better than the other two proficiency levels. With regard to RCs with resumptive pronoun in direct obj position, the mean scores in percentages showed an incremental trend (45%, E; 57.50%, I and 64.66%, A). A Bonferroni post hoc test showed there is a significant difference in scores involving resumptive pronoun in direct obj position between Elementary and Advanced levels ($p<0.001$) and between Elementary and Intermediate levels ($p=0.054$). With increase in proficiency, the participants' ability to judge this set of items also increased. However,

no significant difference is registered in the scores of RCs with resumptive pronoun in the position of obj of prep ($p=0.286$, $SD=2.63$) and in the position of obj of comp ($p=0.217$, $SD=2.60$) and proficiency levels, indicating participants' ability to correctly reject these items is similar across the board. These are ungrammatical items and the below 60% results (obj of comp=47.83%, E; 56.75%, I; 49.00%, A) indicate that the participants have stabilized (since no significance difference is registered) across the board showing that when it comes to ungrammatical items, they are definitely non-native like.

Significant differences were registered between RCs with *wh*-island involving direct obj ($p=0.049$, $SD=2.51$) and obj of prep ($p=0.012$, $SD=2.56$), and proficiency levels respectively (see Table 3). However, a Bonferroni post hoc test revealed no significant difference in the mean scores of RCs with *wh*-island involving direct obj among the three proficiency levels, indicating that the difference in the mean scores between them is rather small. A Bonferroni post hoc test showed a significant difference in the mean scores of RCs with *wh*-island involving obj of prep between participants in the Elementary and Advanced levels ($p=0.033$). A proficiency related progression is seen in both RCs with *wh*-island involving direct obj (52.91%, E; 61.66%, I; 62.33%, A) and obj of prep (48.91%, E; 59.08% I; 61%, A). The mean scores for *wh*-island involving subject and obj of comp (52.66%, E, 60.16%, I, 62.00%, A; and 46.16%, E, 40%, I, 48.33%, A;

respectively) indicate that the participants are similar in their knowledge of these items since there is no significant difference ($p=0.088$, $SD=2.61$ and $p=0.371$, $SD=2.37$ respectively).

With regard to RCs with CNP involving subject and obj of prep, a one-way ANOVA registered significant difference between the scores of these items and proficiency levels ($p=0.016$, $SD=2.61$, $p=0.016$, $SD=2.56$ respectively). The mean scores showed a proficiency related progression, i.e. 45.66%, E; 50%, I; 61%, A; and 52.33%, E; 60.91%, I; and 65.35%, A respectively. Further, a Bonferroni post hoc test indicated a significant difference in the mean scores of

RCs with CNP involving subject extraction between participants at the Elementary and Advanced levels ($p=0.021$). A Bonferroni post hoc test also showed significant difference in the mean scores of items with CNP involving obj of prep between Elementary and Advanced level participants ($p=0.025$), suggesting that the participants' ability to reject these ungrammatical items increases with proficiency. With regard to RCs with CNP involving direct obj and obj of comp, a one-way ANOVA registered no significant difference between the scores of these items and proficiency levels ($p=0.351$, $SD=2.48$ and $p=0.607$, $SD=2.23$ respectively), indicating that the participants

Table 3

Comparison of mean scores of types of ungrammatical RCs between the proficiency levels

RC Type	Elementary (%)	Intermediate (%)	Advanced (%)	SD	df	F value	p value
RP direct obj	45.00	57.50	64.66	2.80	2	9.190	0.000*
RP obj of prep	51.00	55.25	58.33	2.63	2	1.264	0.286
RP obj of comp	47.83	56.75	49.00	2.60	2	1.545	0.217
WH isl subject	52.66	60.16	62.00	2.61	2	2.476	0.088
WH direct obj	52.91	61.66	62.33	2.51	2	3.07	0.049*
WH isl obj of prep	48.91	59.08	61.00	2.56	2	4.57	0.012*
WH isl obj of comp	46.16	40.00	48.33	2.37	2	0.997	0.371
CNP subject	45.66	50.00	61.00	2.61	2	7.73	0.016*
CNP direct obj	50.91	43.91	50.66	2.48	2	1.054	0.351
CNP obj of prep	52.33	60.91	65.35	2.56	2	4.28	0.016*
CNP obj of comp	46.08	41.66	45.33	2.23	2	0.501	0.607
DFCP	30.33	43.16	41.33	1.62	2	3.09	0.048*
Null Subject	50.00	34.83	50.66	1.90	2	3.78	0.025*

*significant at $p \leq 0.05$

were similar in their ability to correctly reject these ungrammatical items. However, the mean scores show a U-shaped pattern (see e.g. McLaughlin, 1990): 50.91%, E; 43.91%, I; 50.66%, A for direct object items, and 46.08%, E; 41.66%, I; and 45.33%, A for obj of comp items. The Elementary participants accepted the items to about 51% and 46% respectively. However, as linguistic competence becomes more sophisticated as evident in the Intermediate group, they rejected some of the items that were accepted by the other two groups, as part of the process of restructuring their interlanguage (see McLaughlin, 1990), at about 44% and 42% respectively. With increased proficiency in the target language, the participants seemed to accept more of the said items at about 51% and 45% respectively, indicating emerging increased understanding of the rule underlying the formation of these RCs. The results here exemplify a phenomenon that has been documented in the literature as moving “two steps forward and one step back” (Grassi & Barker, 2010), also known as backsliding (Brown, 2007; Lightbown & Spada, 1999). However, the increase in both cases stabilized at around 51% and 45% for CNP direct obj and obj of comp items.

A one-way ANOVA registered significant difference in the mean scores of RCs with DFPC (Doubly Filled Complementizer Phrase) in relation to proficiency levels among the three groups of participants ($p=0.048$, $SD=1.62$). However, a Bonferroni post hoc test did not show any significant difference in the mean

scores of RCs with DFPC between the three levels, showing that participants in all the three proficiency levels rejected these ungrammatical items at similar levels. In other words, the interlanguage of the participants for these items stabilized across the board at 30.33%, E; 43.16%, I; 41.33%, A. However, the mean scores in percentages indicated that the Elementary level participants were least accurate. The finding here further confirms what is available in the literature, i.e. L2 learners show obvious developmental stages in their acquisition (see Escobar, 2001; Wong, 1999, 2002). The results here also indicate some instances of U-shaped development. It is also observed that for these ‘difficult’ items, participants’ interlanguage generally stabilize at rather low levels of accuracy normally around 50%. It was found that RCs involving SM are easier to acquire compared to RCs involving LM extraction. This is to be expected due to the increased processing load involved in LM (Kiss-Gulyás, 2004).

It is evident that the participants of this study found it easier to correctly judge RCs involving SM and LM extraction of subject. This could be due to RCs involving subject extraction being more predictable and more accessible than other RCs (Keenan & Comrie, 1977, as cited in Wang et al., 2011). Another possible reason could be due to the frequent occurrence of the subject RC thus making it easy to process (e.g. Wang et al., 2011). The participants also had difficulty in correctly judging items involving SM extraction of genitive RCs. However, the participants’ performance improved with

increased proficiency. A similar trend is evident in LM genitives although the two more proficient groups were similar in their performance on these items. As such, the results obtained in the GJT indicated that with increased proficiency, the participants generally did improve but they did not reach native like level as their scores were below 80% (Wong, 1999, 2002).

CONCLUSIONS

The results of the GJT showed that the L1 Tamil speakers were able to correctly judge English RCs involving SM and LM extraction of subject, direct object, prepositional object, genitive and object of comparison to a certain extent. However, the Elementary participants seemed to have more difficulty identifying the correct grammatical RCs involving extraction of genitive subject/object.

Based on the results obtained in the GJT, it can be assumed that the interlanguage of the Elementary level participants is still in the initial stages. At the early stage, L2 learners seemed to have difficulty with the L2 grammar; hence, their early interlanguage constructions are often fragmentary. Within this limitation, L2 learners attempt to embed sentences to produce RCs by combining all the words present in the sentences (Schwartz & Sprouse, 1996). However, the mean scores of the GJT for Elementary level participants showed that they still have not acquired the English RC structure accurately.

The results provide evidence that the head parameter or branching direction is not problematic for the participants,

in particular, the more proficient ones. Similar studies conducted by Flynn with Japanese learners (Japanese being a head final language) have provided evidence that the participants of her study attempted to organize the L2 grammar around the head initial configuration of English (Flynn & Espinal, 1985). The results of this study suggested that the participants were not trying to map the head final property of their L1 onto the L2 grammar. Unlike English, Tamil is a postposition language, where postposition words may occur as free postpositions or bound postpositions. According to Perpiñán (2008), prepositional object RCs are difficult to acquire due to the complexity involved in its construction which increased cognitive and processing load while Chang (2004) argued that participants' scant knowledge in the structure of the prepositional phrase might make it difficult to understand the need for a preposition. In this study, these two reasons seemed to have contributed to the outcome of the results.

The participants in this study generally could correctly judge subject RCs (both active and passive) involving SM and LM. However, it is evident that they had difficulty judging the genitive and prepositional object RCs. In particular, the Elementary level participants had difficulty in judging these grammatical items (Table 2). Even the Advanced level participants' performance was not native like in judging RCs involving LM extraction of prepositional objects and genitives. Zhang et al. (2008) explained that the genitive relative pronoun *whose*

was unique and it would be easy to acquire only if the learners could figure out the possessive relationship between the head NP and subject of RC.

In addition, the participants' performance in judging the ungrammatical items was poor as the overall mean scores for these items are rather low compared to the overall mean scores of the grammatical items (refer to Tables 2 and 3). A number of the ungrammatical items which were constructed in line with the participants' L1 (Tamil RCs) were accepted by them as grammatical in English. This is because RCs involving non *wh*-movement is acceptable in their L1. In the case of RCs with resumptive pronoun, the number of participants who accepted these items decreased with increased proficiency in the target language. In this case, the non *wh*-movement option could be the default setting (see e.g. Schachter, 1990, for similar results) in the participants' L1. A logical explanation is that since the Tag RC in Tamil is used principally in the colloquial variety (Lakshmanan, 2000), it is not unreasonable to assume that the L1 Tamil speakers would have been exposed to this RC type in their input from infancy. As such, this could have formed the default setting for RC formation in their L1.

Generally, the participants have exhibited their ability to correctly judge grammatical English RCs. The data suggested that the rural secondary and post high school L1 Tamil speakers had acquired English RCs in stages. The rate of errors as indicated in the data decreased

with increase in proficiency in the English language. This indicated that the participants seemed to have the ability to restructure the parameter in Tamil RC construction to that of English RC construction as the L1 has made available both options, $\pm wh$ -movement, although the default is $-wh$ -movement. As the participants' proficiency improved, they were able to judge and by extension, produce grammatical English RCs gradually. As Hawkins (2001) proposed, constant and more importantly, sustained exposure to the target property of the L2 can and do lead to greater accuracy in judgement of the property. This seems to be the case here. However, the participants' overall performance in the ungrammatical items showed that they were not able to reject these items efficiently compared to their ability to correctly accept the grammatical items.

Taken together the findings here indicate that the process of restructuring which seemed to have taken place in the participants when they were judging the correct grammatical items did not take place when they were judging the incorrect ungrammatical items. This suggests that the participants' underlying RC structure was still the Tamil Tag RC (non *wh*-movement) as discussed earlier. The results for the resumptive pronoun and *wh*-island RCs seem to support this although there is a proficiency related progression.

The results of the ungrammatical English RCs which were constructed in line with the RC structure of the participants' L1 (Tag RC) showed that the participants may not have

acquired the functional features associated with the categories in the formation of the English RC. The participants' underlying mental representation reflected that they are still resorting to the RC structure of their L1 due to their lower rejection levels of the ungrammatical items compared to the grammatical items. What seems to have occurred is due to L2 English input over the years, the participants had managed to learn to structure the grammatical items appropriately. Hence, it can be concluded that the findings of this study support the Failed Functional Features Hypothesis as proposed by Hawkins and Chan (1997).

As mentioned earlier, the selection of the participants of this study was done to ensure the reliability of this study. It was a difficult task to locate participants based on the preset criteria, i.e. they must be L1 Tamil speakers who are currently residing (younger participants) or had resided (adult participants) in areas where Tamil is spoken as L1 and used as the main medium of communication at home. As such, although it was not as difficult to select the Elementary level sample (98 participants), it was definitely a challenge to select the Intermediate level sample (22 participants) and the Advanced level sample (25 participants). Hence, it is recommended that further similar studies involving L1 Tamil speakers be carried out with a bigger sample with varying proficiency levels in order to confirm the outcome of this study.

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Appendix A (Instruments)

Grammaticality judgement test

Sample of Grammatical items

1) *Extraction from matrix clauses - short movement*

a) Extraction of subject (active)

The animal which attacked our chicken is a fox.

b) Extraction of subject (passive)

The drawing which was painted by Rahim is beautiful.

c) Extraction of direct object

The man whom Ali hit is Ahmad.

d) Extraction of preposition object

The magazine which Siti sent her story to is Readers Digest.

e) Extraction of genitive

Balan whose finger was broken could not play hockey anymore.

f) Extraction of object of comparison

The boy whom Ganesh ran faster than is Rahim.

2) *Extraction from embedded clauses - long movement*

a) Extraction of subject (active)

The woman who I heard likes cooking is Rani.

b) Extraction of subject (passive)

The ring which the police say was stolen by thieves is a diamond ring.

c) Extraction of direct object

The teacher whom the students say Ali pushed is Mr. Raduan.

d) Extraction of preposition object

The student whom we assume Raja planned the festival with is Bala.

e) Extraction of genitive

Ramu whose shirt we believe is torn has gone home.

f) Extraction of object of comparison

The boy whom we think Raju is more intelligent than is Ganesh.

Sample of Ungrammatical items

A) *Relative Clauses with Resumptive Pronouns*

a) Extraction of direct object

The computer which Ali bought it is a HP.

b) Extraction of preposition object

The officer whom I sent the letter to him is Mr. Idris.

c) Extraction of object of comparison

The girl whom Savitha is more intelligent than her is weak in mathematics.

B) Subjacency Violations

a) Extraction from Wh-Islands

i) Extraction of subject

The boy who they wonder whether talks the most is Ganesh.

ii) Extraction from direct object

The teacher whom they ask whether Azrul kicked is En.Azman.

iii) Extraction from preposition object

The man whom they wonder when Suseela will go out with is Murthi.

iv) Extraction of object of comparison

The boy whom they wonder whether Ganesh ran faster than is Ashwin.

C) Extraction from Complex Noun Phrase

i) Extraction of subject

active

The driver who they made the claim drives a bus is Mr.Maniam.

passive

The curry that I heard the news was cooked by your mother is very tasty.

ii) Extraction of direct object

The man whom they read the news the student hit is Mr.Samy.

iii) Extraction of preposition object

The man whom we heard the story Suseela goes out with is Murthi.

iv) Extraction of object of comparison

The boy whom we heard the story Darmen runs faster than is Prasanth.

v) Extraction of a 'doubly-filled' CP

Mrs.Sarah who that teaches Mathematics always comes early to school.

vi) Extraction of ungrammatical null subjects in embedded clauses

My niece cried when lost her Barbie doll.

Sample of Grammaticality Judgement Test

Instructions :

Read the following sentences and write down either 1,2,3, or 4 in the brackets provided.

Given below are the scale for the numbers:

1. definitely acceptable
2. probably acceptable
3. probably unacceptable
4. definitely unacceptable

1. The animal which attacked our chicken is a fox. []
2. Ramu whose shirt we believe is torn has gone home. []

Appendix B

Participant Selection Form

Provide information at relevant columns

Part A

Name: _____

Age: _____

Secondary School: _____

First Language: _____

Main Communication Language: _____

Part B

Name of University: _____

Faculty: _____

Semester: _____

Part C

Profession: _____

Address: _____

Visits to English speaking countries

Name of country : _____

Duration of stay : _____

Purpose of visit : _____

Contacts in the countries visited: _____

Frequency of visit : _____

(The participants selected from the two secondary schools (G1 and G2) at the point of the selection of participants for the study did not attend any tuition class for English language.)

Corpus-based Analysis of Lesbian, Gay, Bisexual, and Transgender Representations in *Republika*

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ABSTRACT

In the mass media of Indonesia, lesbian, gay, bisexual, and transgender (LGBT) issues and news are often marked topics. Indonesian media report LGBT news in three main ways: (1) with a proportional, measured response; (2) with a distorted focus on sexuality and sensation; and (3) out of proportion in response to religious views. Only the first of these variants are able to maintain neutrally on LGBT issues. This paper examines how the LGBT community was represented in the 2016 corpus of the daily newspaper *Republika*. Fowler's *Language in the news* (1991) discussion of representation in news media and Stubbs's *Text and corpus analysis* (1996) corpus-based theory were used to investigate representations of LGBT issues in *Republika*. A collocation analysis of the LGBT node in concordance analyses indicates that there were eight types of LGBT representation in the 2016 *Republika* corpus, six of which were negative which are as a phenomenon, as sexual deviation, as an uninherited sexual orientation, as against religion, as actors and victims of crime, and as contrary to Islam; the remaining two representations were neutral.

Keywords: Collocates, concordance, corpus, LGBT, representation, semantic meaning

INTRODUCTION

The legalization of lesbian, gay, bisexual, and transgender (LGBT) sexuality is hotly debated in Indonesia, with the intensity of the conversation peaking in 2016. Widespread attention was first drawn by digital posters containing information on LGBT consultancy services provided by an educational institution. This led to public controversy over the existence of LGBT individuals and their rights. The government

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was drawn in, due to an effort to bring Articles 284, 285, and 292 of Indonesia's Criminal Code, which concern adultery, rape, and molestation, to judicial review, in the hope of legally classifying homosexual intercourse as a crime.

The attention of the news media was thus attracted to the topic. Among the media that incessantly report LGBT issue is the Indonesian daily newspaper *Republika*, which published at least 809 news articles on LGBT issues in 2016. This massive reporting effort compelled Indonesia's Lesbian, Gay, Bisexual, Transgender, Intersexual, and Queer (LGBTIQ) Forum to respond. The forum indicated that *Republika* exhibited bias in its reporting on this issue. This was evident from such headlines as "*LGBT Ancaman Serius*" [LGBT a Serious Threat], published by *Republika* on January 24, 2016. Nevertheless, *Republika* claimed to be neutral in its report, as indicated in the article entitled "*Soal LGBT, Republika Bersikap Netral*" [About LGBT, *Republika* Is Neutral] published on February 18, 2016. Indonesia's LGBTIQ Forum indicated that the headlines and contents of *Republika*'s articles violated the journalistic principles and were not composed according to the standards and rules of news reporting. Yuli Rustinowati, the coordinator of the forum, asserted that *Republika* failed to include any perspective from the LGBT community or qualified experts, which violated journalistic ethics. As a result of this finding, Indonesia's LGBTIQ Forum had made three demands to *Republika* which were: (1) to admit that the headlines and its contents violated

journalistic ethics; (2) to apologize to LGBTIQ group and society; and (3) to apologize in media (printed and online) and provide a special page for the LGBT support groups to write their thoughts.

Subroto Kardjo, the managing editor of *Republika Daily*, asserted that *Republika* was neutral on LGBT issues but must uphold Indonesia's cultural values. That is, Indonesian society subscribes to heteronormativity, which proscribes the sexual orientation of those in the LGBT community. In this sense, *Republika*'s claim to at once be neutral on LGBT issues and to represent society's cultural values are clearly contradictory. This contradiction and its implications require study.

Discourse analysis can be used to determine what point of view is being taken toward an issue in a body of linguistic expression. Fowler (1991) called the news a type of discourse that subjectively reflected social reality and empirical facts and that was instrumental in developing a social construction of reality. However, the type of media and its underlying social focus can influence the representation by means of the language used, including specific grammatical, syntactical, and vocabulary choices (Fowler, 1991). Fowler claimed that nearly everything that was written was articulated from a particular ideological position, meaning that language worked as a refracting medium, with vocabulary choices that revealed the perspective and beliefs of the writer or publication.

To indicate the perspective taken by media organizations, a body of text can be

analyzed using corpus linguistics. Corpus linguistic analyses and collocation and concordance analyses, in particular, are tools that can be used to objectively and comprehensively interpret media data. In linguistics, the term collocation refers to the lexical relationship between two words that tend to occur together in a text (Stubbs, 2001) and a word that commonly occurs within the neighbourhood of another is known as a collocate (Baker & Hardie, 2006). If a certain collocation repeatedly appears in the media in discussions of a specific issue, this could influence how people think about that issue, thus influencing general discourse (Stubbs, 1996). Concordance analysis, which generates a list of all of the occurrences of a particular search term in a corpus together with the few words to the left and right of it can be used to understand how collocations are used in the media (Baker, 2006).

Discourse analysis has already been conducted on LGBT representation in mass media outlets in Indonesia. Oktaviani (2016) studied the representation of LGBT people in mass media and found that the *Republika* represented them as deviating from Indonesian religious practices and as having mental health problems. That in-depth analysis found inherent discrimination that violated journalistic principles with unbalanced reporting that responded only to market demand.

Other work has been done on LGBT issues in Indonesia. In Davies (2017), for example, it was found that the Indonesian government openly subscribed

to heteronormativity. The human body and its genitals, in particular, are considered to be the basis for the determination of gender. Consequently, someone born with female genitalia is expected to become capable of bearing children. The role of the government in constructing sexual identity is reflected in their programs and regulations, as Boellstorff (1999, 2005) noted. This can be seen in governmental programs, especially those of the New Order era that represented heterosexuality as the national sexual identity. Gender and sexuality are interrelated social constructs (Alimi, 2004). Alimi (2004) also illustrated that heterosexuality, as a social construct, was interpreted in the mind of society as part of propriety.

Alimi (2004) showed that the mass media had played a complementary role to the government in promoting heterosexuality as the national identity by framing it as natural and other sexual practices as abnormal. Alimi (2004) also found that that homosexuality was constructed as an immoral act and a threat to the nation in articles published in national newspapers. In addition to their construction of a version of the national identity, the Indonesian mass media have also contributed a representation of the existence of gay and lesbian individuals in society that relates them to foreign ideas and people, implying a picture of homosexuality as resulting from a globalized influence on Indonesia. As a result, it is commonly assumed in Indonesian society that the emergence of LGBT people in Indonesia is owing to

Western influence. This is in spite of studies that have shown the long-standing presence of homosexuality in Indonesia.

As Oetomo (2001) indicated, homosexual relations are in fact known and acknowledged in society in general. In some Indonesian cultures, homosexual practices, such as the *warok* [an adult male dancer who is believed to be very powerful] and *gemblak* [a young handsome boy dancer] relationship in Ponorogo, which is entered into by the *warok* to maintain his supernatural prowess, are well known. In addition, transvestite artists and performers are found in *bedhaya* dance, *serimpi* dance, and *ludruk* performance (Murray, 1997). Wilken as cited in Murray (2000) explained that men began to take female roles in the traditional dances *bedhaya*, *serimpi*, and *reog*, among others, at the end of the nineteenth century. Graham (2002) and Davies (2017) showed that, in contrast to the traditions of homosexuality in Java, the Bugis publicly recognize four or five genders, namely *oroane* [male], *makunrai* [female], *calalai* [Assigned female at birth (AFAB) but behave in masculine ways and take a male role], *calabai* [Assigned male at birth (AMAB) but behave in feminine ways and take a female role], and a type of para-gender, *bissu* [a priest that is traditionally described as embodying both male and female]. The relationship between a *warok* and a *gemblak* in Ponorogo and the existence of both *calalai* and *calabai* among the Bugis provide evidence for indigenous LGBT practices in Indonesia that are traditionally accepted. However, according to Oetomo

(2001), attitudes toward homosexuality and its acceptance have shifted as a result of Western and Islamic influences.

Baker (2005) studied on LGBT news reported in Western mass media namely *Daily Mail* and *Mirror* had revealed that *gay* was considered not only behaviour but also an identity; further, the words associated with *gay* were largely negative.

This study examined representations of LGBT issues and people in news text from the daily newspaper *Republika*, guided by Fowler's (1991) conception that each publication or media outlet had a particular way of reflecting reality. It was expected that *Republika* would have a developed point of view that could be elucidated from its choices of vocabulary and relational contextualization. The analysis conducted in this study was similar to Oktaviani's (2016) work on the discussion of LGBT issues and individuals in text from *Republika*. In this study, however, the LGBT representations were assessed with vocabulary usage and collocates, an approach similar to that of Baker (2005). LGBT-related vocabulary and collocations were analyzed using a concordance of a text published by *Republika* in 2016.

MATERIALS AND METHODS

A corpus linguistics approach was chosen to examine representations of LGBT representations in *Republika* in the interests of credibility (Baker et al., 2013), as it could better illuminate LGBT related issues in media. The text from news articles published

by *Republika* online in 2016 was used as the corpus. To identify how the LGBT community was represented in the corpus, three common corpus analysis procedures were adopted namely frequency analysis, collocation analysis, and concordance analysis, all of which were performed using the corpus software Sketch Engine. Frequency analysis identified what was most talked about. Among the results of collocation analysis, however, only the significant collocates were extracted, and they were then classified using the UCREL Semantic Analysis System (USAS) to examine semantic preferences. Concordance analysis was used to determine semantic preferences from the collocates, using semantic preferences and concordance analyses for an in-depth study of LGBT representations.

RESULTS AND DISCUSSIONS

Using the Sketch Engine data analysis of the 2016 *Republika* news corpus, it was found that the term that appeared most frequently in relation to LGBT issues and individuals was LGBT, for which 5,380 tokens were found. Table 1 presents the findings of the words most frequently associated with LGBT issues in the *Republika* corpus. The word associations in the table were calculated using the association score function found in the Sketch Engine (Killgarif et al., 2014).

In Table 1, it is indicated that Indonesia and Jakarta were among the most commonly found associated words, which is to be expected, as these indicate where the

location of the news items. The third most common word was *gay*, which indicated a more prominent focus on same-sex relationships between males than on other sexual orientations, such as lesbian or bisexual. An interesting finding is indicated in Table 1, namely, the word *anak* [child] was the ninth most common collocation. In 2016, the Indonesian Broadcasting Commission (KPI) issued a press release stating their prohibition against broadcasting or campaigning for LGBT people on television so that children and teenagers could be protected from deviant influences and so that Indonesian cultural and religious norms could be respected and upheld (Badgett et al., 2017; Komisi Penyiaran Indonesia, 2016a, 2016b). Because the term *LGBT* was the most commonly found in the corpus in this connection, a concordance analysis was conducted, which indicated that the *LGBT* node had 239 significant collocates, with a T-score ≥ 5 , indicating that these often appeared in society.

Table 1
Ten highest-frequency collocations

No.	Words	Frequency
1	LGBT	5,380
2	Indonesia	1,755
3	gay	1,491
4	<i>mereka</i>	1,478
5	<i>ada</i>	1,413
6	<i>Republika</i>	1,368
7	<i>kata</i>	1,245
8	<i>dia</i>	1,241
9	<i>anak</i>	1,210
10	Jakarta	1,100

Table 2 shows the 10 most significant collocates, among which transgender and bisexual were the most prominent, an interesting contrast to the common appearance of the word gay in the data represented in Table 1. As in Table 1, Indonesia and *Republika* were also in the top 10 in Table 2. The two of the ten most significant collocates with LGBT represented the same semantic field: *kelompok* [group] and *kaum* [clan], both of which were associated with the semantic field group and both of which tended to appear to the left of the LGBT node. The collocates *kelompok* and *kaum* often appeared as noun phrases with LGBT, such as *kelompok LGBT* and *kaum LGBT*, which indicated that the LGBT community was often talked as a group. Like *kelompok* and *kaum*, the word *perilaku* [behaviour] was also dominant in Table 2 and tended to appear on the left of the *LGBT* node in the noun phrase *perilaku LGBT*, indicating that being LGBT was itself considered a behaviour.

Table 3 shows the distribution of the significant collocates from the *LGBT* node, based on semantic categories and preferences, where categories were related

to word classifications in the semantic field, and the semantic preferences included words that semantically related to the given semantic field. The left-hand collocates refer to words occurring in the left-hand side of a node, so do the right-hand collocates. This study used the semantic categories developed for the USAS, by Archer et al. (2002). Table 3 gives the distribution of the 183 most significant *LGBT* node collocates, as found in the given semantic fields. In all, twelve semantic categories were found for the LGBT collocates. The three semantic categories with the most collocates were general and abstract terms (A), with 45 collocates, social actions, states, and process (S) with 35 collocates, and names and grammar (Z), with 52 collocates.

In the categories Z, the noun collocates had interesting semantic preferences; however, because this study focuses on the use of nouns, investigating these collocates will be left for a future study. In Indonesian syntax, nouns are often subjects of sentences and clauses. Halliday (2014) indicated that a subject was the focus of a message in a clause where something was a given action or process or became an actor in an action; thus, a noun could appear as a theme. In a

Table 2
Ten most significant collocates of LGBT node

Left-hand collocates	Node	Right-hand collocates
<i>transgender</i> [transgender] (562), <i>biseksual</i> [bisexual] (528), <i>Republika</i> (38), <i>tidak</i> [no] (196), Indonesia (179), <i>perilaku</i> [behaviour] (291), <i>kelompok</i> [group] (250), <i>kaum</i> [clan] (235), <i>ada</i> [available] (139), <i>pelaku</i> [perpetrator] (179)	LGBT	<i>transgender</i> [transgender] (29), <i>biseksual</i> [bisexual] (48), <i>Republika</i> (536), <i>tidak</i> [no] (380), Indonesia (252), <i>perilaku</i> [behaviour] (81), <i>kelompok</i> [group] (28), <i>kaum</i> [clan] (20), <i>ada</i> (144), <i>pelaku</i> [perpetrator] (18)

clause, such a theme is the departure point for the recipient of the message to interpret it. Therefore, nouns and noun phrases playing the role of a theme can attract readers a topic.

Table 3
Semantic categories based derived from the collocates of the LGBT node

Categories	Collocates	Preferences
A - General and abstract terms	<i>harus</i> [must], <i>ada</i> [available], <i>menjadi</i> [become], <i>merupakan</i> [to be], <i>adalah</i> [to be], <i>bisa</i> [able], <i>mengatakan</i> [to tell], <i>soal</i> [matter/issue], <i>menurut</i> [to obey], <i>fenomena</i> [phenomenon], <i>kata</i> [word], <i>dapat</i> [be able], <i>bahaya</i> [danger], <i>menyimpang</i> [deviant, distorted], <i>salah</i> [wrong], <i>sangat</i> [very], <i>boleh</i> [may/might], <i>hanya</i> [only], <i>bertentangan</i> [to be contrasted to], <i>dilakukan</i> [to be done], <i>masalah</i> [problem], <i>perlu</i> [need], <i>katanya</i> [(he/she said)], <i>aktivitas</i> [activity], <i>penyimpangan</i> [deviance, distortion], <i>keberadaan</i> [existence], <i>menegaskan</i> [to emphasize], <i>serius</i> [serious], <i>memiliki</i> [to have], <i>melakukan</i> [to do], <i>persoalan</i> [problem], <i>meminta</i> [to ask, to request], <i>menyebut</i> [to mention], <i>menjelaskan</i> [to explain], <i>baik</i> [nice], <i>normal</i> [normal], <i>melihat</i> [to see], <i>terbuka</i> [open], <i>terjadi</i> [happen], <i>melanggar</i> [to break (a law)], <i>baca</i> [to read], <i>berbahaya</i> [dangerous], <i>mendapat</i> [to get], <i>fitriah</i> [human nature], <i>perkembangan</i> [development]	general activities, existences, problems, modals, safety, wrong states
B - The body and the individual	<i>penyakit</i> [disease]	disease
E - Emotion	<i>ancaman</i> [threat], <i>kekerasan</i> [violence]	comfort, harassment
G - Government and the public	<i>pemerintah</i> [government], <i>propaganda</i> [propaganda], <i>HAM</i> [human right], <i>hak</i> [right], <i>hukum</i> [law], <i>aktivis</i> [activist], <i>UU</i> [the law], <i>legalisasi</i> [legalization], <i>RUU</i> [bill], <i>melegalkan</i> [to legalize], <i>kejahatan</i> [crime]	politics, legal action
I - Money and commerce in industry	<i>dana</i> [fund]	financial
M - Movement, location, travel, and transport	<i>kembali</i> [to return]	time
N - Numbers and measurement	<i>banyak</i> [many], <i>satu</i> [one], <i>semua</i> [all], <i>marak</i> [growing up], <i>berbagai</i> [various], <i>beberapa</i> [several], <i>pertama</i> [first], <i>segala</i> [any]	amount
Q - Language and communication	<i>media</i> [media], <i>minta</i> [to ask, to request], <i>facebook</i> , <i>program</i> [program], <i>poster</i> [poster], <i>tayangan</i> [scene]	kinds of media

Table 3 (continue)

Categories	Collocates	Preferences
S - Social actions, states, and processes	<i>transgender</i> [transgender], <i>biseksual</i> [bisexual], <i>perilaku</i> [behavior], <i>kaum</i> [group], <i>pelaku</i> [actor], <i>kelompok</i> [group], <i>masyarakat</i> [society], <i>komunitas</i> [community], <i>gerakan</i> [movement], <i>mendukung</i> [to support], <i>mempromosikan</i> [to promote], <i>seksual</i> [sexual], LGBT, <i>organisasi</i> [organization], <i>sosial</i> [social], <i>promosi</i> [promotion], <i>konseling</i> [counseling], <i>pendukung</i> [proponent], Islam, <i>dilarang</i> [to be prohibited], <i>dukungan</i> [support], gay, <i>melarang</i> [to prohibit], <i>warga</i> [resident], <i>korban</i> [victim], <i>kalangan</i> [circle], <i>generasi</i> [generation], <i>anak-anak</i> [children], lesbian, <i>publik</i> [public], <i>penyebaran</i> [spreading], <i>ketua</i> [chairman], <i>dukung</i> [to support], <i>budaya</i> [culture], <i>anggota</i> [member]	groups, social identity, sexual preferences, authorities, participations, alignments, social behaviors
T - Time	<i>sudah</i> [already], <i>akan</i> [will], <i>telah</i> [already], <i>masih</i> [still], <i>mulai</i> [start], <i>belum</i> [not yet]	time of events
X - Psychological actions, states, and processes	<i>kampanye</i> [campaign], <i>agama</i> [religion], <i>isu</i> , [issue], <i>menurutnya</i> [according to someone], <i>menilai</i> [to judge], <i>menolak</i> [to reject], <i>dinilai</i> [to be judged], <i>sikap</i> [attitude], <i>tolak</i> [to reject], <i>dianggap</i> [to be considered], <i>penolakan</i> [rejection], <i>menentang</i> [to against], <i>paham</i> [concept], <i>anti</i> [anti-], <i>mengakui</i> [to admit]	concept, alignments, judgments
Z - Names and grammar	<i>dan</i> [and], <i>yang</i> which], <i>di</i> [in], <i>untuk</i> [to], <i>tidak</i> [not], <i>ini</i> [this], Indonesia, <i>dengan</i> [with], <i>itu</i> [that], <i>dari</i> [from], <i>dalam</i> [in], <i>Republika</i> , <i>juga</i> [also], <i>dia</i> he/she], <i>tak</i> [not], <i>terhadap</i> [toward], <i>mereka</i> [they], <i>karena</i> [because], <i>sebagai</i> [as], <i>tersebut</i> [these], <i>terkait</i> [related], <i>ke</i> [to], <i>ia</i> [he/she], <i>pada</i> [on], <i>bukan</i> [not], <i>tentang</i> [about], <i>secara</i> [by], <i>atau</i> [or], <i>negara</i> [country], <i>seperti</i> [such as], <i>kampus</i> [campus], <i>kepada</i> [to], <i>jika</i> [if], <i>termasuk</i> [including], <i>agar</i> [in order to], <i>masuk</i> [enter], <i>kalau</i> [if], <i>sebab</i> [because (p), cause (n)], UNDP, <i>tapi</i> [but], <i>namun</i> [however], <i>sejak</i> [since], <i>bangsa</i> [nation], <i>saya</i> [I], <i>jangan</i> [do not], UI [Universitas Indonesia], Pacquino, <i>apalagi</i> [moreover], MUI [Indonesian Ulema Council], <i>lembaga</i> [institution], <i>kami</i> [us], Asia	mass media publications, cohesive markers, place names, organizations or institutions

Exceptional Findings

Some collocates in the A category had interesting semantic preferences, including *soal* [matter], *fenomena* [phenomenon], and *persoalan* [problem] which appeared in the event preference. The appearance of these collocates showed that LGBT was not only treated as a behaviour or a sexual identity but as an event as well. The word *fenomena* means, among other things, a symptom,

an extraordinary thing, a reality, which indicated that LGBT events are considered ordinary occurrences. In Table 4, LGBT issues appeared as an iceberg phenomenon that is, it seems smaller than it really is, therefore, the assessment of the LGBT community as an iceberg phenomenon indicates its apparently extraordinary nature.

The appearance of collocate for *persoalan* indicated that the LGBT community was seen as a problem;

Table 4
 Concordances with *fenomena* [phenomenon] and *persoalan* [problem]

Left	Node	Right
<i>dan transgender (LGBT). Fenomena gunung es</i> [... and transgender (LGBT). The iceberg phenomenon of LGBT has emerged. All offer their opinion, from...]	LGBT	<i>meledak ke permukaan. Semua beropini, dari</i>
<i>pandangan hidup sekuler. Saat ini, fenomena</i> [... secularism. Nowadays, LGBT phenomenon is becoming a growing concern for society. Some cases ...]	LGBT	<i>kian meresahkan masyarakat. Beberapa kasus</i>
LGBT. Hal ini menggambarkan betapa gerakan [... LGBT. This shows how the LGBT movement has become a serious problem for Moslems and ...]	LGBT	<i>menjadi persoalan serius umat Islam dan</i>
<i>mengedukasi persoalan LGBT. Indonesia darurat</i> [... education about LGBT issues. Indonesia is in LGBT emergency. Its latent danger threatens civilization. What is worse is ...]	LGBT	<i>. Bahaya latennya mengancam peradaban. Parahnya</i>
Adhyaksa Dault di media ini, yang menyebut [... Adhyaksa Dault in this media, that claims that LGBT is a national concern. He asked...]	LGBT	<i>adalah persoalan bangsa. Beliau meminta</i>

furthermore, *persoalan* can also mean “debates, talks; a thing, case, or trouble.” This showed that LGBT issues have a valence as important issues for Indonesia. It was also found that *persoalan* commonly appeared in the corpus with *serius* [serious] and the phrase *umat Islam* [Muslims], indicating that the LGBT community were considered to be a problem for or as the Muslim community.

Sexual Behavior

In addition to collocates with vocabulary showing sexual orientation, LGBT was also found to collocate with *perilaku* [behaviour]. LeVay (2007) illustrated that LGBT behaviour is often seen as sexual behaviour. In Table 5, the first line indicated whether LGBT behaviour was considered right or wrong, and the second line indicated

a questioning of the legitimacy of the LGBT community in Indonesia. The use of the term *dibenarkan* [justified] and the question “*Indonesia menerima pelanggaran perilaku LGBT?*” [Does Indonesia accept the legitimation of LGBT behaviour?], indicated that whether LGBT behaviour was right or wrong remained a topic of debate.

The word *perilaku* was also followed by the phrase *azab Allah* [God’s punishment], as indicated in the fourth line of Table 5. *Azab* can also mean [torment], and the word is often used to describe a torment given by God. According to the belief structure of many religions, an act can be punished with torment if it goes against the rules of the religion. This appearance of the phrase *azab Allah* indicated that LGBT behaviour was considered to contradict the requirements of religion.

Table 5
Concordances with perilaku [behaviour]

Left	Node	Right
<i>serangkaian pertanyaan. Pertama, apakah perilaku</i> [... a series of questions. First, is LGBT justifiable? Second, does the consension of ...]	LGBT	dapat dibenarkan? Kedua, apakah konsesi
<i>Indonesia menerima pelanggaran perilaku</i> [... Indonesia accept the legitimation of LGBT behaviour? Third, how to actively monitor ...]	LGBT	? Ketiga, bagaimana secara aktif mengawal
<i>pelanggaran Same Sex Attraction (SSA). Perilaku</i> [... the legitimation of Same-Sex Attraction (SSA). LGBT is started from a homosexual preference ...]	LGBT	dimulai dari suatu preferensi homoseksual
<i>tumbuh subur nya perilaku homoseksual atau</i> [... the thrive of homosexuality or LGBT means inviting punishment from God ...]	LGBT	sama artinya dengan mengundang azab Allah

Sexual Orientation

Previously in Table 3, category S, showed that LGBT was collocated with lesbian, gay, bisexual, and transgender most likely because LGBT was an acronym of these words. This concordance indicated that LGBT was considered a form of sexual orientation. LeVay, as cited in Sell (2007), explained that sexual orientation was expressed as sexual behaviour or feelings toward an individual of different sex, the

same sex, or both. As indicated in Table 6, this orientation was considered to be unusual and even a denial of human nature. As stated above, *fitriah* [human nature] was associated with something divine that is inherited; this implied the assumption was that LGBT behaviour is a denial of human nature, not an innate sexual orientation. Table 6 also showed that even the very existence of LGBT people was debated, indicating the presence of contradictions within society.

Table 6
Concordances with transgender [transgender], gay [gay], and biseksual [bisexual]

Left	Node	Right
<i>lesbian, gay, biseksual dan transgender</i> [... lesbian, gay, bisexual, and transgender (LGBT) are no longer individual behaviours...]	(LGBT)	<i>bukan lagi hanya sebatas perilaku individu</i>
<i>belakang mengapa seseorang berorientasi sebagai</i> [... why someone becomes an LGBT person, namely organ, transgender, and ...]	LGBT	<i>yaitu masalah organ, transgender, dan</i>
<i>lesbian, gay, biseksual dan transgender</i> [... lesbian, gay, bisexual, and transgender (LGBT) must be resisted with positive contents. He ...]	(LGBT)	<i>harus dilawan dengan konten positif. Dia</i>
<i>lesbian, gay, biseksual, dan transgender</i> [... lesbian, gay, bisexual, and transgender (LGBT). LGBT is considered as a denial against human nature and a blemish ...]	(LGBT)	<i>. LGBT dinilai mengingkari fitrah dan menodai</i>

Deviant Sexual Orientation

A collocate of *penyimpangan* [deviance] appeared, bearing a negative meaning which means something that was inappropriate or against the rules and often depicts something that was not approved by social conventions. Table 7 showed that LGBT orientation was itself considered to be a deviation and opposed to the heteronormative social convention. Varela et al. (2011) defined heteronormativity as a regime in which sex, gender, and sexuality match heterosexual

norms and in which homosexual and transgender tendencies were considered abnormal. In Table 7, it was also indicated that the word *penyimpangan* was contrasted with *bukan fitrah* [unnatural]. *Fitrah* [human nature] means “nurtured, holy, talent, and innate,” and it was often considered to be something that comes from God and was innate. The contrast between *penyimpangan* and *fitrah*, therefore, could be taken as an indication that an LGBT person’s sexual orientation did not come from God.

Table 7
Concordances with *penyimpangan* [deviance]

Left	Node	Right
<i>lesbian, gay, biseksual, dan transgender</i> [... lesbian, gay, bisexual, and transgender (LGBT) is seen as a form of deviation.]	(LGBT)	<i>dinilai sebagai bentuk penyimpangan.</i>
<i>sepenuhnya mampu membendung penyimpangan seksual</i> [...completely able to address LBGT as sexual deviations in this region. In the Gulf countries, for example, ...]	LGBT	<i>di kawasan ini. Di negara teluk saja misalnya</i>
<i>mengubah penyimpangan orientasi seksual para</i> [... change the deviated sexual orientation of LGBT persons. Sinyo only tried to remind them ...]	LGBT	<i>. Sinyo hanya berupaya mengingatkan mereka</i>
<i>merambah ke setiap kampus, yang namanya</i> [... spread to campuses, what is called LGBT is a deviation and completely unnatural ...]	LGBT	<i>penyimpangan dan bukan fitrah sama sekali</i>

Group

LGBT was also collocated with the words *kaum* [class], *kelompok* [group], and *komunitas* [community] as shown in Table 8. Following USAS, these collocates were considered to be organized according to the same semantic preference, group. As *kaum*, *kelompok*, and *komunitas* appeared to the left of the LGBT node, they formed such phrases as *kaum LGBT*, *kelompok LGBT*, and *komunitas LGBT*. In the corpus,

most occurrences of LGBT were related to discussions of groups, as was apparent from the frequent appearance of these collocates, as in *kaum LGBT* (217), *kelompok LGBT* (193), and *komunitas LGBT* (155). It is to be inferred here that these texts represent society regarding LGBT people as a group. While the phrases were not used in radically different ways, nevertheless, some undeniable differences did appear.

Table 8
Concordances with kaum [class], kelompok [group], and komunitas [community]

Left	Node	Right
<i>Meksiko mendorong agar pengakuan bagi kaum</i>	LGBT	<i>dan keberadaan homofobia disertakan dalam</i> [... Mexico has encouraged that the acknowledgement of LGBT and the existence of homophobia should be included in ...]
<i>apapun kemasannya. Selain LGBT, tidak.</i>	Kaum LGBT	<i>menuntut hak asasinya, tapi menafikan hak</i> [... whatever it is wrapped with. Aside from LGBT, no. The LGBT community demands their rights, but denies the rights of ...]
<i>pernikahan sesama jenis. Di Indonesia,</i>	LGBT	<i>kembali ingin menunjukkan eksistensinya</i> [... same-sex marriage. In Indonesia, the LGBT community once again tried to show their existence ...]
<i>kelompok</i>	kelompok	<i>diskriminasi yang dirasakan oleh</i> [... discriminations suffered by the LGBT community in Indonesia (and in other countries) are ...]
<i>segala macam aktivitasnya. Apalagi komunitas</i>	LGBT	<i>yang disinyalir penetrasi ke kampus-kampus</i> [... all kinds of activities. Moreover, the LGBT community that has allegedly penetrated campuses ...]
<i>Satu-satunya upaya mengembangbiakkan</i>	LGBT	<i>ini hanya dengan penularan. Karena, kaum</i> [The only way to boost the number of LGBT persons is through infection. This is because ...]
<i>komunitas</i>		

Perpetrators and Victims of Crime

Table 9 showed the concordances for *korban* [the victim] with LGBT. These indicated that LGBT people often appeared as victims, that was, “someone who has suffered due to an incident or criminal act,” implying that being LGBT was considered a loss or being the subject of a crime. The first line of Table 9 indicated that LGBT people found victims and forced them to join their way of life, implying that such individuals were not originally LGBT and only became that way because of the influence of those who were already LGBT people. This also implied that being LGBT could lead to mental health problems and spread HIV-AIDS, as well as that child, could become victims of sexual abuse due to LGBT influence.

Table 9 also indicated how the LGBT community were considered to be causes

of the negative effects that impacted them and society’s response to their existence. The concordances found indicated that LGBT people were discriminated against in society and were often victims of abuse. Because heterosexuality is considered normal, and the LGBT community was considered to be a threat to that normality, it is marginalized and discriminated against. As Boellstorff (2005) stated, sexuality in Indonesia was not considered private: the contemporary government used sexuality to control citizens. If a person does not adhere to heterosexual norms, they will suffer pain and are sinners. They are also not considered to be citizens. A study conducted by Arus Pelangi (the Indonesian Federation of Lesbian, Gay, Bisexual, Transgender, Transsexual and Intersex Communities) in 2013 found that 89.3% of LGBT people in

Table 9
Concordances with korban [the victim]

Left	Node	Right
<i>bagi para korban yang terjebak kehidupan</i>	LGBT	<i>. Entah bagaimana perkembangan RUU terkait</i>
[... for the victims that are trapped in LGBT life. No one knows how the progress of the bill concerning ...]		
<i>pernah jajan di sana, tulisnya. Emoticon</i>	LGBT	<i>Picu Anak Jadi Korban Kejahatan Seksual</i>
[... once snacked there, she wrote. LGBT Emoticons Make Children Victims of Sexual Crime ...]		
<i>tua mereka tahu. Hal pasti, bahaya laten</i>	LGBT	<i>menelan korban. Mulai psikopat, penularan</i>
[... knew. One thing for sure is that the latent danger of LGBT has claimed victims. From psychopath, infection ...]		
<i>memberikan perlindungan terhadap anggota kelompok</i>	LGBT	<i>jika menjadi korban kekerasan. Oleh karena</i>
[... provide protection to members of the LGBT community, when they become victims of violence. Because ...]		

Indonesia had experienced violence (Arivia & Boangmanalu, 2015). Table 9 showed that the LGBT community was seen negatively in the examined materials, and they and the people around them suffered negative effects.

Beside its collocation with *korban* [victims], LGBT was also found collocating with *pelaku* [the perpetrator]. Most collocates with *pelaku* were on the left side

of the LGBT node, and the phrase *pelaku* LGBT appeared 142 times in the corpus. Generally, the word *pelaku* is associated with someone who performs negative actions. In the Indonesian Web as Corpus, for example, words appearing on the border with *pelaku* are often related to the semantic field of crime, including bomb, terror, murder, shoot, and corruption. In Table 10, the LGBT individuals are shown as also

Table 10
Concordances with pelaku [perpetrator]

Left	Node	Right
<i>Sudah melanggar UU dan Pancasila, pelaku</i>	LGBT	<i>yang kena HIV/AIDS justru semakin melonjak</i>
[Violating the law and Pancasila, LGBT persons with HIV/AIDS are getting even more annoying ...]		
<i>Namun, dari perspektif kemanusiaan pelaku</i>	LGBT	<i>patut diayomi dan dibimbing Sehingga mereka</i>
[However, from the perspective of humanity, LGBT persons deserve protection and guidance, so they ...]		
<i>perilaku LGBT ini perlu ditolak. Pelaku</i>	LGBT	<i>seharusnya diberikan penyadaran agar kembali</i>
[... this LGBT behaviour should be rejected. LGBT persons should be reoriented so ...]		
<i>yang hanya 150 orang. Tingginya peningkatan</i>	LGBT	<i>dikarenakan pelaku seks menyimpang setidaknya</i>
[... only 150 people. The significant increase in the number of LGBT individuals that is caused by deviated sexual orientation is at least...]		

associated with ideas of negative behaviour; the fourth line implies that LGBT people were believed to display deviant sexual behaviour, and the first line also indicates that being LGBT was considered not in line with the constitution or the Pancasila (the official, foundational philosophical theory of the Indonesian state in five principles).

Forbidden in Islam

The name of only one religion was found to be collocated with LGBT, namely Islam. The *Republika* probably correlated LGBT with Islam because it claims to represent the Islamic society in Indonesia. *Republika* is founded by the Association of Indonesian Muslim Intellectuals (ICMI) in the 1990s. In the newspaper’s explanation on their vision, it is stated that *Republika* aims to be a national-scale media company which is professional managed in Islamic ways. The newspaper is expected to have an impact on the process of nation-building, cultural development, and the development and consummation of the national faith in the new Indonesian society (Hamad, 2004).

Republika always captures and looks at any phenomena from the perspective of Islam (Wahyudi, 2005).

Boellstorff (2005) found that nine-tenths of Indonesian citizens were Muslim. In Islam, the idea of LGBT people, orientations, and behaviour was not new as it appeared in the Quran (Wafer, 1997). In the era of the prophet Lut (called Lot in most English translations of the Bible), a clan in Sodom was punished by Allah due to their homosexual practices; consequently, it was understood that LGBT behaviour was forbidden by Islam. Table 11 indicated that the existence of an LGBT community was considered a serious problem for Islam.

In the third line of Table 11, the phrase *aktivitas LGBT* [LGBT activity] was followed by *haram* [forbidden]; *haram* is an Arabic word denoting an Islamic concept of “an act that is forbidden by Allah” (Adamec, 2009). Anyone who such a forbidden activity is expected to be punished. The collocation of *aktivitas LGBT* with *haram* implied an understanding that Allah such activities. Therefore, the concordances in

Table 11
Concordance of Islam

Left	Node	Right
LGBT. <i>Hal ini menggambarkan betapa gerakan</i> [... LGBT. This shows how the LGBT movement has become a serious concern for Moslems and ...]	LGBT	<i>menjadi persoalan serius umat Islam dan</i>
<i>ketahanan keluarga, dan budaya bangsa.</i> [... family security and national culture. LGBT contradicts the teaching of Islam and the teaching ...]	LGBT	<i>bertentangan dengan ajaran Islam dan ajaran</i>
<i>Agama Islam jelas mengatakan bahwa aktivitas</i> [Islam clearly states that LGBT activities are forbidden and therefore are not allowed to do. One of ...]	LGBT	<i>haram sehingga tidak boleh dilakukan. Salah satu</i>

Table 11 showed that LGBT behaviour was expressed to be contradictory to Islamic teachings and forbidden by Allah.

Western Culture

Table 12 showed the concordance of *budaya* [culture] with LGBT and indicates the way the LGBT community was viewed in Indonesian culture, according to *Republika*.

In the second line of Table 12, the collocated of *budaya* was followed by the verb *menolak* [reject], indicating an unacceptable, unjustified, or repudiated action. As the object of the verb *menolak* is LGBT in that instance, the line implied that Indonesian culture did not accept the existence of the LGBT community. Table 12 also indicates that marriage and relationships with the same sex were considered inappropriate by Indonesian culture. The first line of Table 12 showed that the rejection of LGBT orientations and the assumption that being LGBT was inappropriate for Indonesian culture

came from a sense that LGBT behaviour contradicted or challenged heterosexuality. According to Boellstorff (2005), heterosexuality was seen in Indonesia as an original element of the culture.

The rejection of and prejudice against LGBT orientations in Indonesian culture were influenced by society's beliefs about the origins of LGBT people. Oetomo (1981) and Boellstorff (2005) had found that many people in Indonesia believed that LGBT people were created by the undue influence of Western culture. At the third line of Table 12, *budaya* appeared collocated with *alam liberal* [liberal nature] to form the phrase *budaya alam liberal* [the culture of liberal nature], and in the fourth line, *budaya* appears collocated with *ketimuran* [eastern, Asian]. The notion of liberalism is often understood to imply freedom and is associated with concepts from Western countries. In the fourth line, the phrase *budaya ketimuran* followed by the verb *bertentangan* [contradict] indicates that

Table 12
Concordances with *budaya* [culture]

Left	Node	Right
budaya Indonesia belum terbiasa dengan [... Indonesian culture is not familiar with LGBT and same-sex marriage. Nevertheless ...]	LGBT	dan menikah sesama jenis. Meskipun begitu
<i>tradisi dan budaya di Indonesia menolak</i> [... Indonesian tradition and culture refuse LBGT. Granted, in every custom and ...]	LGBT	<i>Terbukti, dalam setiap adat istiadat dan</i>
<i>seksualitas dan gender. Menurut Munzir Hitami,</i> [... sexuality and gender. According to Munzir Hitami, LGBT is a culture of the liberal realm that affects...]	LGBT	<i>merupakan budaya alam liberal yang mempengaruhi</i>
Ananda Puja, Kamis (18/2). Menurutnya [... Ananda Puja, Thursday (18/2). According to him, LGBT is contradictory to the Eastern culture and customs ...]	LGBT	<i>bertentangan dengan budaya dan adat ketimuran</i>

eastern culture contradicts the idea of LGBT orientations. Therefore, the collocation of the words *liberal* and *budaya ketimuran*, and the verb *bertentangan* indicated that the LGBT community in Indonesia was considered by *Republika* to be the result of influence by Western culture.

CONCLUSION

The collocation analyses of the *LGBT* node in concordance analyses located 239 significant collocates. The semantic field of these collocates was classified into 12 semantic categories, two of which in particular were further analyzed: general and abstract terms (A) and social actions, states, and processes (S). Eight main representations were elucidated from the analyses of collocations with LGBT, six of which were negative.

The first finding was that the LGBT community was represented as an extraordinary phenomenon (Table 4): for example, *fenomena* [phenomenon] was collocated with *gunung es* [iceberg], and the collocated of *persoalan* [matter] was paired with *serius* [serious] and *umat Islam* [Muslims], indicating that being LGBT was considered both extraordinary and a problem for the Muslim community. Second, LGBT was found to be represented as deviant (Table 5). For example, the collocated of *penyimpangan* [deviance] was contrasted with *fitrah* [human nature], which indicated that LGBT orientations were seen to have come from God. Third, LGBT was found to constitute a sexual orientation because

of its LGBT collocations with lesbian, gay, bisexual, and transgender. However, sexual orientation was considered not something that appeared from birth. Fourth, while LGBT was considered to be expressed in sexual behaviour, collocates indicated that the morality of LGBT behaviour was still under debate in Indonesia. LGBT behaviour was certainly considered a violation of religious rules, as seen in the collocation of *perilaku* [behaviour] with the phrase *azab Allah* [God's punishment]. Fifth, the collocates *korban* and *pelaku* that appeared in Tables 9 and 10 indicated that being LGBT was considered to be something negative that could result in a crime. The same tables indicated that LGBT people were discriminated against, and because of this, they became victims. Sixth, LGBT behaviour was seen as sinful deeds; the appearance of *Islam* followed by *bertentangan* and *haram* indicated that LGBT was considered as an action that violated Islamic guidance and was therefore sinful.

Several neutral associations with the LGBT node also appeared, namely those related to notions of a group and Western culture. The phrases *kaum LGBT* [LGBT clan], *kelompok LGBT* [LGBT group], and *komunitas LGBT* [LGBT community] indicated that LGBT individuals were seen as a group. The notion of LGBT was also found to be considered an offspring of Western culture because Indonesia is generally heteronormative, and heterosexual relationships and marriages are foremost in social conventions. Boellstorff (2015)

also found that heterosexual relationships and marriages were broadly considered to represent the real Indonesia.

These results are drawn from a methodological combination of discourse analysis and corpus linguistics, comprehensively accounted for LGBT representation in *Republika*. The use of the corpus method showed that representation and discourse studies are accessible to both the qualitative and the quantitative method. The results of the analysis indicate that the attitude of Indonesian society toward LGBT people is negative. However, due to the length constraints, not all collocations with LGBT are analyzed here. Further research should pursue all collocates to give a broader account of the representation of LGBT in Indonesian media. In addition, using more media publications or other sources of news could bring greater insight into the perspective that Indonesia has toward LGBT.

This analysis has shown that an Indonesian media publication represented LGBT orientations not only as deviant relative to the dominant construction of sexuality within society but also as a threat to the nation. Consequently, LGBT appears to contradict the heterosexual sexual orientation in society, which is considered legal and is legitimated as the only right orientation. Indirectly, the media provides justifications for heterosexuality by repeating statements made concerning LGBT, including the commonly used word in this context, *penyimpangan* [deviance]. The statements published in *Republika*

cannot be separated from ideology. It is widely known that *Republika* has an Islamic bent in its coverage, so it is not surprising that news produced concerning LGBT is framed negatively in the articles it produces and publishes.

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Rejection of Communist Ideology in Liem Khing Hoo's *Merah* (1937): An Examination via Genetic Structuralism

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ABSTRACT

Merah (1937) is a work of Chinese Malay literature that explores issues of communism through the story of a labour strike in Kudus. There have been different opinions regarding communism, and such diversity is embodied in different works. Among Peranakan Chinese themselves at the time, interest in communism was rather lukewarm. Amidst this condition, Liem Khing Hoo wrote a communism-related novel, and this signifies the writing's uniqueness. This research examined how Liem Khing Hoo's particular worldview of communism was applied and emerged within the literary work. Using the sociology of literature approach espoused in Lucien Goldmann's Genetic Structuralism, it was discovered that this literary work rejected communism. In addition, there were also no signs of efforts to eradicate class domination as the text strongly advocated for the humane treatment of labourers. Through this research, it is proven that Liem positions himself on the side of labour without aligning with communism and its mission of class eradication. Liem's rejection of communist ideology is homologous to the worldview of his ethnic group, Peranakan Chinese, implying that the labour movement does not perpetually contradict capitalism.

Keywords: Communism, genetic structuralism, labour, Liem Khing Hoo, *Merah*

INTRODUCTION

Chinese Malay literature existed from the 19th century until the 20th century in the Indies. According to Salmon (1985), there were 3005 Chinese Malay literary works written during the period. However, Chandra (2013) argued that among all these works, literature which discussed the issues of labour and communism was

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hard to find. Given that Chinese Malay literature was published during a time when the Indies were facing a labour movement and rising communist parties, the scarcity of literature exploring the two themes is certainly odd. In the 20th century, there were three political views that dominated the discourse of Peranakan Chinese. A person would support either China, the Indies, or Indonesia (Suryadinata, 1984). On the other hand, supporters of labour movements and communism were not prevalent as they were perceived to cause more troubles during the period in which these issues did not have a stronghold (Suryadinata, 1994; Salmon, 1985).

The Communist Party of Indonesia (PKI) attempted to make a revolution in 1926, but they were neutralized. After the revolution was completely neutralized, the government of the Indies took several steps to put end communism and its followers. About 1,308 people who were labelled dangerous yet ineligible to be prosecuted by the existing law were exiled to Boven Digul (Kahin, 1995; McVey, 2010).

One of the Chinese Malay works that discussed labour and communism was *Merah*, literature written by Liem Khing Hoo, which was published in 1937. Previously, Kwee Tek Hoay had also published work with communist references, titled *Drama dari Boven Digoel* (1928-1932). In 1950, Njoo Cheong Seng wrote *Taufan Gila*, a novel with similar themes. Compared to these two works, *Merah* only focuses on the issue of labour at the time. *Merah* was an interesting novel as it brought

forth the issues of labour and communism, two issues which were still sensitive at the time. The novel tells a story of a work stoppage by cigarette factory labourers in Kudus. The main protagonist is exiled to Boven Digul as an accused communist although he actually refused to join the Communist Party of Indonesia (PKI).

Liem Khing Hoo was born in Wlingi, East Java, in 1905. He passed away in 1945 as a Kenpetai victim (Salmon, 2010). He had an experience as a chief editor, notably for *Tjerita Roman* magazine and subsequently *Liberty* magazine in 1934. Liem Khing Hoo was productive in writing prose such as romance and other short stories. Aside from his 16 romances that were published in *Tjerita Roman* between 1929 and 1940, he also wrote short stories, serials, and non-fiction for *Liberty* magazine in the 1930s. Liem was famous for his two pseudonyms, Romano and Justitia. Romano was his persona for publishing entertainment pieces, writing several short stories, and replying fan letters. On the other hand, Justitia was the name he used for writing columns on political and social conditions in the Indies. In the realm of Chinese Malay literature, Liem is known as a writer who frequently wrote ethnographic stories about the *bumiputra* communities. He never involved himself in partisan politics, but Liem supported the Chinese Indonesian Party, which argued that Peranakan Chinese had equal right to see the Indies as their home without having to convert from their religion or change their names in order to assimilate to the culture of *bumiputra* society (Susanto, 2015).

As *Merah* discussed the issues of labourers and communism despite the low interest in the ism among Peranakan Chinese, this research poses the question of how the writer's worldview on communism is related to aspects of labour and class. Thus far, there has not been sufficient research that examines the writer's worldview in *Merah*. Kasijanto (1992) focused his research on the representation of the cigarette industry within the literary work. He stated that *Merah* represented the society who shifting from agriculture to industry. Baetillah (2007) and Lestari (2016) examined the aristocratic elements in the writing, they found that Soebagija is a *priyayi* though he fought for the workers. Another research by Chandra (2013) examined *Merah* within the political context of 1926, arguing that *Merah* is Liem's effort to criticize capitalism without having to be framed as a supporter of the Communist Party.

Through connecting the writing's structures to each other (especially characters, writer, and the social context of the writing), this research expects to discover the writer's worldview. By examining the writer's worldview, an alternative perspective on labour movements within the period could be discovered.

MATERIALS AND METHODS

This research used sociology of literature, specifically Lucien Goldmann's genetic structuralism. The approach itself was selected due to its ability to identify a writer's worldview reflected through his or her writing(s). For Goldmann, writing is

not merely a result of individual creativity but rather a result of trans-individual mental structure within a social group (Eagleton, 1976). According to genetic structuralism, in order to understand a literary work, it is impossible to detach it from the contexts that shape the writing itself, and these contexts may be economic, social, or even political (Goldmann, 1980).

This approach also applies the terminology "worldview," which refers to a person's or a group's particular articulation (Goldman as cited in Boelhower, 1976). Worldviews must also be connected with relatively homogenous social groups that show homology in similar historical contexts. Therefore, worldviews contain human responses that are always coherent to a context. Such an understanding of genetic structuralism leads this research to focus on not only the literary work's social context but also the writer himself. As a writer becomes a part of a particular social group, a writer's views definitely reflect the perspectives of a particular social group to which he or she belongs.

RESULTS AND DISCUSSIONS

Conflicts between Older and Younger Characters

Merah focuses on a work stoppage at the Koepoe Taroeng cigarette factory as its primary issue. As H. Zainal, the factory owner, made a regulation suspending the labourers' wage, the factory workers started a strike. The regulation itself was the right decision for H. Zainal, the antagonist. He said, "This brings good to our company.

Once these people get their wages, they will return to their own homes and refuse to work further” (p. 29).

H. Zainal expected that the wage suspension would not cause the workers to leave the factory. As long as the workers remained, the factory would remain stable. The factory’s stability is related to its cigarette production, which leads to the factory’s overall income. In the early 1920s, there was a shift in the cigarette business in Kudus, as the sector evolved from home industries to massive factories (Castles, 1982). The cigarette industry in Kudus was gradually developing, and this situation would be a reasonable explanation for H. Zainal to suspend the workers’ pay as a strategy to maintain the profitability of his company. However, the suspension certainly put the workers at a disadvantage.

The strategy was challenged by Soebagia (the novel’s author), H. Zainal’s to-be son-in-law who also worked for the factory. He expressed a different opinion regarding the matter, “Father, these people have their own freedom. And you cannot simply think that they have to be Koepoe Taroeng factory workers for the rest of their lives.” (p.29).

For Soebagia, workers also have the right to choose their own destiny, whether they wish to keep working for H. Zainal’s factory or quit. Soebagia saw that the measures taken by H. Zainal to keep the workers were unethical as it violated the workers’ rights. Soebagia did not see the workers as factory owners’ handmaids.

H. Zainal and Soebagia represent two contradictory views of labour at the Koepoe Taroeng factory. In line with Goldmann’s (1980) argument, a literary work cannot be detached from the social structure that puts the work into shape. The dichotomy of thoughts in the novel, then, is not far from the Dutch Ethical Policy that was implemented by the Indies government at the time. With its ethical policy and liberal mission, the Indies government was attempting to eradicate noblemen symbols of feudalism while planting the seeds of new hope for younger generations. This attempt was embodied in the establishment of high schools for *bumiputra* (Ricklefs, 1995). Furthermore, western education also brought progressive thinking to aristocrats who had the opportunity to be educated at the time.

H. Zainal is the representation of old groups who were still influenced by feudalistic patterns of thoughts. On the contrary, Soebagia is the representation of youths who were accustomed to more progressive ways of thinking. As an OSVIA (*Opleiding School Voor Inlandsche Ambtenaren*) graduate, schools for civil servants provided by the Indies government, Soebagia had certainly read many western books that opened his mind to the nature of labour. Western education inspired younger generations (particularly those who came from an upper-middle-class background) with fresh ideas (Yamamoto, 2011).

Through his attitude and perspective, Soebagia is apparently attempting to “fix” H. Zainal’s ways of treating the workers, and this is apparent from the following:

You have no malicious intent to deceive the workers. But what you have done has put them in a financially difficult situation, nor an intention to steal the wages they deserve. But you have not given them what they are owed. Now hundreds of these workers returned to their villages, begging [to the company] in spite of having worked for Koepoe Taroeng for years, in spite of having wages that are due. Such is a flawed way [of doing business]. We have gained our victory through away with a due. And now, the due is finally here. (Liem, 1937, p. 31).

Clearly affiliating himself to the labourers, Soebagia challenged H. Zainal's world of ideas and his actions against the workers of the factory. Nevertheless, Soebagia did not criticize H. Zainal as a person; his critiques were aimed more at his system of payment. He indirectly warned H. Zainal that workers would not let themselves submissively accept financial persecution at H. Zainal's hands

Soebagia's warning came true when impatient workers finally began a labour strike and started a second one when H. Zainal did not grant the workers' wishes on the first rally. When the second strike did not yield the expected result, the workers rallied in front of the Regent's office. The demonstration caused the Regent to call H. Zainal and ask him to conduct a dialogue with the workers, mediated by the Regent himself.

The text describes that the strike was a culmination point emerging from the resistance, disappointment, and repressions the workers experienced since their wages were suspended. The labour strike in the text uses a formula similar to real-life strikes during that period. Workers would initiate a strike when what their employer gave them did not meet their satisfaction. It seemed that workers at the time were beginning to understand industrial systems (Sandra, 2007), and this reinforced their ability to strike successfully.

It is important to note that the initiative to perform the strike came from the workers themselves. This notion was carried out when Karsiman, the workers' representative, relayed the issue to the local Regent:

“That is simply not true, my lord. All of us stop working because of our own willingness. No one provoked us. We only think that H. Zainal deceived us” (Liem, 1937, p. 46).

The workers in *Merah* were depicted as having the consciousness and strength to assert their rights. By emphasizing that the strike came from their own willingness, H. Zainal's view of labour as his minions has been debunked. Labourers are shown here to be a group of human beings capable of resisting when their rights are taken away from them. Such notion is in accordance to Marx and Engels' views, which argue that collective protest can be an indicator of class consciousness resulting from an economic contradiction between capital accumulation

on one side and proletarianization on the other (Saptari, 2013).

In the text, the workers successfully won their demands, which were protected and granted by the police. Consequently, H. Zainal had to pay the workers' wages that he had suspended for a long time. Witnessing the Koepoe Taroeng cigarette factory workers' victory, other cigarette factory workers joined them and formed a Cigarette Factory Labor Union.

With Koepoe Taroeng cigarette factory workers' victory, other labours who experienced the same problem directly formed a Union Labor and searched for a capable person to be their leader. And they unanimously chose Soebagia to lead them, for Soebagia's name has become popular among fellow workers. (Liem, 1937, p. 55).

From the quotation, it can be inferred that the Koepoe Taroeng cigarette factory worker's victory revived the consciousness and strengthened the courage of workers from other cigarette factories. The feeling of being equally shared by these cigarette factory workers fueled the establishment of the Cigarette Factory Worker Union, which became the manifestation of the workers' power to speak about their complaints to the factory owners.

The workers' success in gathering their power for their movement was not enough; they needed to choose a leader who did not come from their own kin. Soebagia came from an aristocratic background

but still sympathized with the workers' conditions, and workers saw him as their perfect representative. As he stood on the confluence between the workers and employers, Soebagia was expected to ably convey the workers' aspirations.

Referring back to Goldman's (1980) theory, literary treatment of a labour strike is strongly related to its social context. The occurrences within the story imitate the existing models of the work's contemporary real-world society. During that time, although there were strikes initiated by the Labor Union, there were also strikes that were in fact begun by the initiative of workers, an example of which being when sugar factory workers initiated a strike in 1919 (Shiraishi, 1997).

Rejection of Communist Ideologies in *Merah*

Soebagia's close relationship with the workers led to the accusation that he was someone who was "merah" (red). In the text, "merah" was a connotation for communist ideology proliferating in the Indies during the 1920s (McVey, 2010). Even though the performed labour strike was in line with Marx and Engels' thoughts, Soebagia rejected communist ideology and the "red" label attributed to him. This was proven by Soebagia's explanation to the Regent during the aftermath of the Communist Party's failed attempt at revolution.

"I shall ask you a question: Is it true that recently, on the 27th of August, Moesa, the great leader of PKI paid a visit to your residence?"

“That is so, my lord.”

“And what was the purpose of his visit?”

“To persuade me to join his party.”

“And did you accept his invitation?”

“No, my lord.”

“Why?”

“Because I have no faith in taking part in such movement’s interests.”

(Liem, 1937, p. 84)

Moesa (Muso)’s visit to Soebagia’s residence became the Regent’s reason to exile Soebagia to Boven Digul. For him, because Muso was one and the same as PKI, his visit served as sufficient evidence that Soebagia was true “merah.” As noted earlier, after the failed communist revolution attempt at the end of 1926, the Indies government took several measures to eradicate followers of communism, one of which was to banish allegedly dangerous figures to Boven Digul (McVey, 2010).

Soebagia assertively refused to join PKI through his clear statement, “because I have no faith for taking part in such movement’s interests.” Such rejection stems from Soebagia’s views, which were different from PKI’s. This is an indication that while Soebagia understood communism he consciously rejected PKI’s existing ideology despite both of them similarly defending the labourers.

Underlying differences between PKI and Soebagia’s philosophy were explicitly explained by the character of the Regent’s

daughter, Tirtaningsih. She respected Soebagia’s position as the head of the Cigarette Factory Worker Union:

I do not concur with his beliefs, but I do respect his noble character and moral values. Besides, he isn’t one of the “reds” who seek conflict with the capital owners. The core of his belief is to protect the needs of the oppressed. (Liem, 1937, p. 77).

The above reveals the underlying ideological differences between Soebagia and PKI. Soebagia only wished to ensure that the workers receive their rights and live properly without any missions to end capitalism. On the other hand, PKI resisted against capital owners who created class inequality between the proletariat and the capitalists, their ultimate aim to erase capitalism.

Through the Cigarette Factory Labor Union, Soebagia struggled for the workers’ welfare. He demanded that employers treat workers in a more humane way.

“...just as the employers have the right to dismiss an employee, so does a worker deserves to walk away from his job assuming the work does not give him any satisfaction” (Liem, 1937, p. 60).

Soebagia did not demand the eradication of the class structure or fight against capitalists. He merely asserted that employers should think about the rights of their workers. To him, workers have authority over themselves. Workers are not

mere controllable “things” that belonged to employers; they have free will and the ability to quit their jobs. On the other hand, employers must exist so that labourers have access to jobs.

Meanwhile, communism aims for the eradication of the class gap, aiming toward the condition in which employers, workers (or maids), and profit-seeking become non-existent. As everything is based on cooperation, there would be neither political nor economic competition. There would be no such thing as responsibility or ownership. The only upheld law would custom. Jail, orphanage, and extorting government apparatus would be no more (McVey, 2010).

The time setting of *Merah* takes place between 1926 and 1927. During that period, PKI has gained victory over party hegemony in the Indies. Furthermore, PKI was the organizer of the Indies’ two greatest labour strikes, namely the *Pegadaian* (pawnshop) labour strike in 1922 and the railroad workers’ strike in 1923. After these incidents, labour strikes were constantly framed as the “red’s” parasitical activities attributed to PKI and labelled dangerous (Bloembergen, 2011).

At the end of 1926, PKI made a failed attempt at revolution. In the following year, the Indies government exterminated PKI by apprehending people suspected to be involved in the movement. It would be logical, then, if Soebagia’s support to the workers led to him being accused of being “merah” despite the fact that he was not a supporter of PKI.

Liem Khing Hoo’s Anticomunist Ideology in *Merah*

The characterization and social settings in Liem Khing Hoo’s *Merah* are both influenced by the writer’s background as a journalist. According to Goldmann, a literary work is strongly tied to its author as the structure within a work is not a pure idealistic creation created from reality. It is the author who creates the structure and even (unconsciously) puts it into existence (Boelhower, 1976).

Under the pseudonym Justitia, Liem wrote about a cigarette factory in Kudus (Justitia, 1933). Titled “*Tabaks-accijns*” [Tobacco tax], his writing criticized the imposition of the cigarette factory tax, which led small-scale cigarette factories into bankruptcy, surely adding to the number of unemployed. It is important to note that his alignment with the common people is conspicuous in this writing.

His writings display his sympathy for marginal voices. In *Merah*, he expressed his restlessness caused by the current bad economy into writing that took place in Kudus, a town that he understood well. He knew that most cigarette businesses in the town were run by *Santris*, hence H. Zainal’s appearance as the factory owner. The word “Haji” in the name was the marker of H. Zainal’s *Santri* origin. The fact that many cigarette factories were owned by *Santris* was also supported by Castles in his writings (Castles, 1980).

Soebagia’s appearance was also influenced by Liem Khing Hoo’s background. He was a young intellectual

Peranakan Chinese who was well acquainted with the youth culture at the time, which was overflowing with idealism. The writer's choice to present Soebagia's character this way also signified both the habits of a writer and the social structure that overshadowed the writer and influenced him to create this literary work (Goldman, 1980).

Liem had also written two columns in the 1932 edition of *Liberty* magazine, and his article contained opinions regarding Chinese Malay communities. His writing, titled "Manoesia-Oetama," emphasized the spirit of nobleness in order to become the ultimate human being (*manoesia oetama*) (Liem, 1932). What Liem intended by "nobleness" was measuring everything not merely from economic perspectives, but also from the side of humanity. Meanwhile, intended for youth readers, his other writing titled "Kasoekeran Pokohnja Berhasil" asserted the importance of learning from hard times (Liem, 1932). These two long pieces of his contain one particular recurring apparent notion, which is that youths are the only group of people who are capable of bringing the winds of change to the society, especially the Peranakan Chinese society. This idea persisted and shows up in *Merah* with the presentation of Soebagia as his protagonist, an intellectual nobleman. Liem's alignment to youths was apparently influenced by the current *zeitgeist*. *Merah* was published in 1937, a time when the spirit of nationalism was high. Figures who shared the limelight in politics were mostly youths from both *bumiputra* and Peranakan Chinese societies.

A year after the failed communist revolution in the Indies, Kwee Tek Hoay published a work discussing the issue of communism. However, Kwee did not focus his writing on the life of labourers and seemingly selected Boven Digul as the work's setting for the sake of sensationalism (Chandra, 2013). Contrary to Kwee, Liem's *Merah* focused on the life of labourers during the first decade in the aftermath of the failed communist revolution. Thus, *Merah* actually presented an issue whose sensitivity and degree of disturbance was already trivial to the colonial government. Had *Merah* been published not long after the communist rebellion, the issues of communism and the labour movement would have been highly sensitive as the government would see that everything related to the *bumiputra* Labor Union had the potential to turn into a political movement (Ingelson, 2015).

As a journalist who focused on the dynamics of the current situation, Liem had certainly paid attention to the development of communism in the Indies. In the year *Merah* was published, the Indies had just recovered from an economic depression, and poverty was then still ubiquitous. His restlessness about the issues facing marginal groups came through in *Merah*. Similar to Goldmann's theory (as cited in Boelhower, 1976), historical and social facts can be expressed through the individual sensitivity of a creator within his or her work.

The fact that Liem was a Peranakan Chinese while his protagonist Soebagia was depicted as a *bumiputra* aristocrat is odd in that Liem was deliberately presenting

a protagonist coming from a racial group different than his. One explanation that could be inferred is that Soebagia was Liem's effort to follow the existing convention within the literature at the time. At the time, it was more interesting to write about the life of an aristocrat compared to portraying a commoner's story. Kwee's *Drama di Boven Digoel* and Semaoen's *Hikajat Kadiroen* as *Merah*'s predecessors also used the same formula in depicting aristocratic protagonists (Chandra, 2013).

Liem Khing Hoo firmly rejected communist ideology in *Merah* realizing as he did that communism's ultimate goal was class eradication. On the contrary, his work did not espouse the eradication of the capital-based class. Labourers were still in need of employers in order to keep working. Liem rejected communism not only through *Merah* but also through his other novel, *Berdjoeang*, which tells the story of the formation of a new community in Borneo for the unemployed. Liem's second novel focused on the life of marginal groups while explicitly rejecting communist ideology through the characters and the narrator's dialogues.

Liem Khing Hoo's rejection of communist ideology is homologous to the attitude of Peranakan Chinese at the time. In fact, the number of Peranakan Chinese who joined the movement was insignificant. Peranakan Chinese did not give their support to the PKI rebellion as they predicted that their lives would be jeopardized if the communists took control of power in the Indies (Suryadinata, 1994).

Liem Khing Hoo's rejection of communism was the manifestation of his worldview, one that could not be detached from the social praxis in which he was involved (Goldman, 1980). Liem lived in a society which refused communism, and this affected his objective consciousness. In addition, despite using a *bumiputra* character within the text, Liem still imposed his consciousness as a Peranakan Chinese.

Previous researchers have found that generally, Peranakan Chinese communities rejected communism. Nevertheless, Peranakan journalists actively monitored the development of PKI in the Indies (Suryadinata, 2010). Liem similarly showed signs of rejection to communism in *Merah*. *Merah* is the result of his contemplation and worries for marginal societies. Once again, he supported labour movements and their demands for the humane treatment from their employers, but he still rejected the idea of class eradication. These two aspects could be seen as Liem's worldview regarding labourers and class.

Liem's knowledge of the development of communism in the Indies brought him to the realization that everything related to the labour movement, no matter how trivial, would be automatically linked to PKI. This is also closely related to the fact that during the early 1920s, there were many cases of labour strikes in the Indies (Ingelson, 2015). Amidst this situation, Liem expressed his criticism of communism and how the ideology sees the issues of labour through *Merah*. Whatever sort of labour movement was depicted in *Merah*, it was never based on the spirit of communism.

CONCLUSION

Labourers in *Merah* were depicted as agents with the ability to speak their minds, the courage to assert their rights, and class consciousness. The workers' demands were met within the story, but in achieving their goal, they remained dependent on someone from a higher social class to lead their movement. Such a condition indicates that workers were still a marginal group. *Merah* does not espouse the extreme idea of class eradication and explicitly rejected the ideology of communism. The workers did not wish to wage a war with the capital owners. *Merah* certainly defends workers, but this does not necessarily mean that the work itself is a pro-communist text.

Liem's alignment with workers expressed in *Merah* is consistent with his other journalistic writings. Soebagia's depiction as a young idealist was coherent with the existing *zeitgeist* of the period. As a Peranakan Chinese, Liem perpetuated his kin's attitudes in rejecting communism. Liem never agrees to the eradication of the capitalist class. In fact, the class gap was preserved within the text, and the condition was interpreted as a necessity so that workers may remain employed. Liem's alignment to workers by demanding humane treatment from the employers could be interpreted as his own worldview. The labour movement presented in *Merah* is the embodiment of Liem Khing Hoo's alternative perspective, arguing that labour movements do not always base themselves on communism and therefore do not perpetually reject capitalism.

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Secondary World Infrastructures and Storyworld of *The Little Prince* Novella

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ABSTRACT

Since the early 21st century, world-building has become more visible as imaginary worlds move into mainstream entertainment, leading to an exciting and emerging field of world-building studies. The purpose of this study is to explore the imaginary world of *The Little Prince* novella, a significant literary work by Antoine de Saint-Exupéry, through its non-narrative structures and its narrative. The entire text was extracted for data collection and analysis. The types of secondary world infrastructures identified were space, time, characters, nature, culture, language and philosophy. These infrastructures were found to form the imaginary world by constituting its locations, temporality, populations, materiality, customs, mode of communication and truths. The physical events and the mental events of the dynamic component of the storyworld were found to form the world through the progression of the narrative in the wide frames of past and present, as well as through the narrow frame. This study has implications for the type of works examined and the method employed in world-building studies, as well as for creative writing, content creation and literature education.

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INTRODUCTION

Imaginary worlds are fictional worlds that are produced by any form of aesthetic activity such as storytelling, music composition,

painting, dance and cinema (Doležel, 1998). These worlds that are built of words, images and sounds can then be experienced vicariously through various media, such as books, drawings, films and video games (Wolf, 2012). Although imaginary worlds have existed for a long time, they have become more prominent in recent times. The rise of interest in imaginary worlds is driven by advancement in media and technology, enabling worlds to be more immersive and interactive (Ryan, 2017).

World-building is the construction of an imaginary world, and may be performed for various reasons (Wolf, 2017). For example, world-building may be used to build an imaginary world for entertainment purposes, to propose possibilities or even to satirise (Wolf, 2012). With the current prominence of imaginary worlds, world-building has become more visible in the entertainment industry (Proctor & McCulloch, 2016). Subsequently, this has led to a rise of interest among researchers from various fields such as psychology, philosophy, film studies and video game studies (Wolf, 2012).

However, there are two types of gaps in the literature of world-building. Firstly, most world-building studies have focused only on particular imaginary worlds (Proctor & McCulloch, 2016). For example, in the context of literature, worlds in works such as *The Lord of the Rings* and *Harry Potter* are the mainstay of many studies such as Castleman (2017), Ekman and Taylor (2016), Kelly (2016), Samutina (2016) and White (2016). This may be because worlds that have been expanded through

sequels or through a series of books tend to be elaborate, providing a wealth of world information to analyse (Wolf, 2012). Secondly, world-building studies tend to be based on a single approach, focusing on either the non-narrative structures (elements of an imaginary world's design, such as its physical settings, characters' languages and cultures) of the imaginary world, or on the narrative (plot of the story). Examples of studies on the former include Kennedy (2016), Castleman (2017), Kelly (2016) and Mochocki (2016), while the latter include Leavenworth and Leavenworth (2017), Mossner (2017), Tyler (2015) and Bohman (2016).

The problem could be addressed from two perspectives; firstly, concerning which worlds are the subject of research, and secondly, how these worlds are studied. Some worlds are deemed more valuable or are more privileged over others, even though there are other examples which are just as popular, intriguing and complex "existing far beyond academia's current purview" (Proctor & McCulloch, 2016, p. 481). Furthermore, most researchers only use a single approach as the main frame for studying and interpreting the imaginary world. This may prevent a holistic analysis of a world since both non-narrative structures and the narrative are related and influence each other in the world-building process (Wolf, 2012).

To challenge these problems, the novella *The Little Prince* by Antoine de Saint-Exupéry (1943/2000) was selected as the data to be analysed due to its length.

Novellas are “short to medium-length” narratives in prose which fall between 15 000 to 50 000 words (Hutchinson, 1998, p. 948). As a stand-alone novella, *The Little Prince* is not a common choice for world-building research compared to novels that come in a series or have sequels. The purpose of this choice is to widen the scope of current research by adding to the works that break away from the generic. Besides that, in this study, narrative as a form of world-building is analysed in addition to non-narrative structures, in line with the researchers’ argument that this provides a more comprehensive approach to world-building analysis. *The Little Prince* itself is a significant work of literature to be studied, having been officially translated into 300 languages, with 200 million sales worldwide (“The Book”, 2017). To summarise the story, *The Little Prince* is a fable about a pilot who befriends a boy (whom he calls ‘little prince’) who has travelled from his home planet.

This study has three objectives:

(1) To identify the types of secondary world infrastructures used in the imaginary world of *The Little Prince* novella; (2) To explore how the types of secondary world infrastructures form the imaginary world of *The Little Prince* novella; and (3) To investigate how the dynamic component of the storyworld forms the imaginary world of *The Little Prince* novella using: (i) Physical events and (ii) Mental events. The corresponding research questions (RQ) of this study are as follows:

RQ 1: Which types of secondary world infrastructures are used in the imaginary world of *The Little Prince* novella?

RQ 2: How do the types of secondary world infrastructures form the imaginary world of *The Little Prince* novella?

RQ 3: How does the dynamic component of the storyworld form the imaginary world of *The Little Prince* novella using:

- Physical events
- Mental events

Conceptual Framework

Secondary world infrastructures by Wolf (2012) are used to analyse non-narrative elements, while the dynamic component of the storyworld by Ryan (2014) is used to analyse the narrative in the imaginary world of *The Little Prince*.

(1) Secondary world infrastructures

In this study, these infrastructures are referred to as non-narrative structures or elements as their main function is not to advance the plot, but rather to provide “background richness and verisimilitude to the imaginary world” (Wolf, 2012, p. 13). These elements are summarised following Wolf (2012) as below:

i. Space

Space is one of the most basic elements needed for a world, as places need to exist for the events of the story to occur. Space can be organised by maps, which connect different locations together, unifying them into one imaginary world. Examples of features in maps are mountains, deserts and forests (Wolf, 2012).

ii. Time

Time covers the temporal range of an imaginary world's events, of the past, present and future. Timelines act as an organisational tool for time by connecting narrative events together temporally in order to form a history of the imaginary world, and may be implied through the use of calendars, characters' ages, seasonal changes, and other details related to time (Wolf, 2012).

iii. Characters

Characters are the inhabitants of the imaginary world, who are the recipients of the experiences narrated in the story. They can be organised using genealogies, which refer to the relationships between characters. These relationships can be familial, social or institutional (Wolf, 2012).

iv. Nature

Nature refers to the physical setting of a world, such as their geological and biological structures, as well as their ecosystems. For example, the imaginary world may feature new species of flora, fauna and even people. To a larger extent, nature includes the material composition of a world and its law of physics (Wolf, 2012).

v. Culture

Culture refers to the customs and traditions of the characters who inhabit the imaginary world. It can be implied through depictions of architecture, clothing and artefacts which consequently inform characters' worldviews and beliefs, as well as other infrastructures such as language and mythology (Wolf, 2012).

vi. Language

Language in this framework is more concerned with constructed languages, rather than natural languages. Constructed languages are fictional languages invented by the creator of an imaginary world. They may be very important to a world or may just be used to add aesthetic quality, and can range in complexity (Wolf, 2012).

vii. Mythology

Mythology structures imaginary worlds by providing historical depth through the use of legends and origin stories of ancient figures, mythical beings and supernatural creatures. Mythology may also embody philosophy, as the two infrastructures are closely connected (Wolf, 2012).

viii. Philosophy

Philosophical views can be conveyed explicitly through the author's direct commentary and characters' verbal statements, or implicitly through characters' behaviours and choices. For example, protagonists are likely to represent the author's philosophical stance, while antagonists may represent the vice versa (Wolf, 2012).

(2) Dynamic component of the storyworld

The storyworld conceives of the narrative and the imaginary world as one entity; in this view, the plot of the story is the basic element that structures the world (Ryan, 2014). The dynamic component of the storyworld which consists of physical events and mental events are summarised following Ryan (2014) as below:

i. Physical events

Physical events are “causes of the changes of state that happen in the time span framed by the narrative” (Ryan, 2014, p. 36). The ‘time span framed by the narrative’ can be divided into the narrow frame and the wide frame. The narrow frame consists of the events that form the focus of the story. The wide frame involves a “backstory” which consists of past “events that precede the proper beginning of the story”, and an “afterstory” that follows the conclusion of the events in the narrow frame, which may be set in the present or future (Ryan, 2014, p. 36). The ‘causes’ in Ryan’s definition of physical events refer to the events that happen to characters or actions taken by characters that bring changes to the current state of affairs as the story progresses.

ii. Mental events

Mental events are “the character’s reactions to perceived or actual states of affairs” (Ryan, 2014, p. 36). Mental events must be linked to physical events in order for the physical events to be understood. Examples of mental events are the motivations of characters or the emotions that they feel in physical events.

MATERIALS AND METHODS

The material of this study is the text in *The Little Prince* novella. The novella was written by Antoine de Saint-Exupéry and was first published in 1943. It consists of 27 chapters and 93 pages. This study took a text-oriented approach in literary criticism, which meant that the text was the focal

point of interpretation (Klarer, 2004). Extra-textual factors such as the author, audience and the wider context were not included in the analysis. This approach is in line with the objectives and scope of the study, as only the text of *The Little Prince* novella is analysed. As the data of this study is text, textual analysis was used for the analysis of data. Textual analysis is the close and detailed examination of texts in terms of their content, meaning and structure to produce possible and likely interpretations of those texts (Lockyer, 2008). Textual analysis can also show how different components of a literary text relate to each other, and create meaning as a whole (Sinha, 2004).

Analysis

The data were first analysed for the types of secondary world infrastructures used in the imaginary world of *The Little Prince* novella. The identified types of secondary world infrastructures were then described in detail. Next, the data were analysed for the dynamic component of the storyworld. This was done by describing the physical events and mental events found in the text. The following excerpts are samples of data analysis, presented in order of the research questions posited:

RQ 1: Which types of secondary world infrastructures are used in the imaginary world of *The Little Prince* novella?

Concerning the Secondary World Infrastructure of Space. Several locations were identified in the text, demonstrating the use of space in the imaginary world. These

locations show that this imaginary world has a space in which other secondary world infrastructures exist and the events of the story occur. Examples of locations on Earth and beyond this planet can be observed in Table 1.

RQ 2: How do the types of secondary world infrastructures form the imaginary world of *The Little Prince* novella?

Concerning the Secondary World Infrastructure of Nature. The infrastructure of nature forms the materiality of an imaginary world. It can be analysed in terms of its “physical, chemical, geological, and biological structures and the ecosystems connecting them” (Wolf, 2012, p. 174). In the imaginary world of *The Little Prince* novella, the natural elements of Earth and the planets in outer space, as well as the way these elements operate, are quite different from each other.

In the case of Earth, there are not many changes to its natural design that would make it appear as an entirely new or different planet. For the most part, it is Earth as readers know it. For example, details about

geological structures describe a real, rather than a fictional location of Earth – the Sahara desert in Africa, where the main events of the story unfold. As illustrated by the little prince himself, the desert is “all dried up, full of sharp points, and very salty” (de Saint-Exupéry, 1943/2000, p. 62). Existing plants and animals like baobabs, grass, radishes, corn, boa constrictors, elephants, sheep and chickens are also found on this imaginary world’s Earth, as mentioned in characters’ conversations. However, terrestrial characters, such as the flower in the desert, the roses, the snake and the fox who meet and talk to the little prince indicate that this planet is a slightly different version of Earth. On this Earth, certain flora and fauna are anthropomorphised and are able to verbalise their thoughts and feelings, despite only being heard by the little prince.

As for the extra-terrestrial realm, the infrastructure of nature is invented to a greater degree. For example, the flora, in particular the baobab trees, are extremely dangerous to the point of being able to destroy their host planets. Labelled as a “bad plant” by the little prince, a baobab

Table 1

Text indicating the use of space in the imaginary world of The Little Prince novella

Location	Text
Sahara desert on Earth	“So I kept my own company, without anyone whom I could really talk to, until six years ago, when I made a forced landing in the Sahara desert.” (p. 7)
Garden on Earth	“He was standing in front of a garden blooming with roses.” (p. 64)
Outer space	“He found himself in the vicinity of Asteroids 325, 326, 327, 328, 329, and 330.” (p. 34)

tree will “bore right through a planet with its roots” and “clutters everything” if it is not pulled up and is left to grow (de Saint-Exupéry, 1943/2000, p. 20). Once this has happened, the tree “can never be got rid of afterwards” (de Saint-Exupéry, 1943/2000, p. 20). As baobab trees are “the size of churches”, the consequences are immense for small planets: “if the baobabs are too numerous, they will finally make the planet explode” (de Saint-Exupéry, 1943/2000, p. 19-20). The rose on the little prince’s planet is anthropomorphised like the plants and animals of Earth, suggesting that it is not only in the Earth’s design of nature that certain flora and fauna are able to speak, but is in fact, the universal design of this imaginary world. Table 2 summarises the aspects of nature of both the terrestrial and extra-terrestrial realms.

RQ3: How does the dynamic component of the storyworld form the imaginary world of *The Little Prince* novella using:

- Physical events
- Mental events

The dynamic component of the storyworld forms an imaginary world by

encapsulating its progression of events, as the world evolves from one situation to the next, with events occurring in the narrow frame or wide frame, or both (Ryan, 2014). In the imaginary world of *The Little Prince* novella, the physical events unfold in both the narrow frame and wide frame.

The narrow frame consists of the events that unfold in the period of time that the narrator spends with the little prince in the Sahara desert, from their first encounter to the little prince’s departure from Earth. These events form the focus of the story. Events that occur out of the narrow frame are categorised under two types of wide frames, which are the wide frame of the past and wide frame of the present. The former consists of the events that occur before the narrator and the little prince meet each other, while the latter consists of events that unfold in the present time after the little prince’s departure in the narrow frame, with the narrator reflecting back on his time with the little prince. Table 3 shows a sample of the physical and mental events that occur during the story’s narrow frame.

Table 2

Nature of terrestrial and extra-terrestrial realms in the imaginary world of The Little Prince novella

Aspect of nature	Terrestrial realm (Earth)	Extra-terrestrial realm
Flora and fauna	Existing plants and animals; certain flora and fauna are anthropomorphised	More invention; flora can be dangerous, fauna can be used for interplanetary travel
Physical structure	Large; contains approximately “two billion inhabitants” (p. 58)	Minuscule; each asteroid contains only one or two inhabitants
Geological structures	Describe real locations	Affected by physical structure of planets; serve practical purposes

RESULTS AND DISCUSSION

In answer to the first research question, seven types of secondary world infrastructures were identified out of the eight types in Wolf's (2012) framework, as indicated in the text. These are space, time, characters, nature, culture, language and philosophy. Only the secondary world infrastructure of mythology was not found. Although it could be argued that the non-human characters such as the fox, the snake and the rose are mythical or supernatural beings due to their ability to speak, no history is provided to explain these characters. The absence of such a history suggests that mythology is not in operation in this imaginary world, since its primary function is to "provide historical depth" for the story's current events (Wolf, 2012, p. 189).

The findings from the first research question are similar to those of Mochocki (2016), who found that the infrastructure of mythology was not used in his study as well.

He found that mythology was not noticeable as an infrastructure because in both settings of *Harry Potter* and *The Witcher* on which the live action roleplays he examined are based on, elements such as "monsters, spiritual beings, ancient heroes, magic and magical items" are not myths, but "reality" for the worlds' inhabitants (Mochocki, 2016, p. 214).

To answer the second research question, the types of secondary world infrastructures form the imaginary world of *The Little Prince* novella by constituting the world's components. Space forms the extra-terrestrial and terrestrial locations of the world. The former are kept distinct from each other, with each asteroid featuring a different inhabitant with a different occupation. This prevents readers from "confusing locations" and also gives each of them "a sense of character and even personality" (Wolf, 2012, p. 160). Time forms the temporal aspect of the world,

Table 3

Physical and mental events of the imaginary world of The Little Prince novella's narrow frame in chronological order (sample)

Physical events	Mental events
The narrator makes an emergency landing in the Sahara desert	The narrator has to do so because of a problem in his aeroplane's engine
The narrator goes to sleep alone	The narrator feels very lonely
The narrator is woken up by the little prince who asks him to draw a sheep	The narrator is surprised
The narrator asks the little prince what he is doing in the desert	The narrator is thunderstruck at meeting the little prince in the desolate desert

giving characters a past and present. It should be noted that although periods of time are indicated, no dates are provided for any of the timespans mentioned. Perhaps no dates are given to leave the timeline in an open-ended state, such that the narrator's present time is simultaneously the reader's present time. This would add an ever-present, lingering quality to the narrator's desperate plea to his readers if they ever meet the little prince: "Do not leave me in such a sorry state: write quickly and tell me that he has returned" (de Saint-Exupéry, 1943/2000, p. 93).

Characters form the human and non-human populations who inhabit the locations of the world. The analysis of the rose, in particular, provides further insight about the little prince's behaviour, as relationships give characters "context", through which they can be understood by "the influence of ancestry, upbringing, and companionship" (Wolf, 2012, p. 172). After the little prince departs from his home planet, and upon arriving on Earth, he specifically seeks out "people" to be his "friends", which he mentions to the non-humans he meets (de Saint-Exupéry, 1943/2000, p. 67). This could be because of his sour relationship with the rose, who is the reason he leaves his home planet in the first place. His intention for seeking humans rather than non-humans therefore, may be that he wants to avoid getting hurt.

Nature forms the flora and fauna, the physical as well as the geological structures of the world's Earth and other planets. Data analysis showed that the natural elements

of the extra-terrestrial realm are invented to a greater degree compared to those of the terrestrial realm, as in the case of the migrating wild birds. The wild birds are an example of infrastructures being "more than merely window-dressing", serving as solutions to "world-building problems", as they are used as a form of transportation by the little prince for his interplanetary travels (Wolf, 2012, p. 174). Culture forms the worldviews and customs held by two distinct groups, that of children and grown-ups. The difference in their worldviews causes much of the conflict between the little prince and most of the grown-ups he interacts with. These instances of conflict are, as Wolf (2012) called them, "cultural clashes" which are typically "central to the stories being told" (p. 184).

Language forms the universal mode of communication for the world's inhabitants. It could be argued that a common lingua franca rather than one, universal language is used, but this is less likely the case. A common lingua franca would suggest that other languages are spoken around the world, but there is no indication in the text of the characters having to switch languages to communicate with one another in both the extra-terrestrial and the terrestrial realms. Philosophy forms the truths of the world that reflect the author's philosophical messages, and which are conveyed through the inhabitants and the natural design of the world. The philosophical idea of "What is essential is invisible to the eye" is embodied through characters who are portrayed as wise, such as the fox and children (de

Saint-Exupéry, 1943/2000, p. 72). This suggests that the author is advocating this idea, especially when juxtaposed with its competing philosophy that is represented through grown-ups, who are for the most part, portrayed negatively.

The findings from the second research question are similar to that of Kennedy (2016) and Castleman (2017), who found real-world influences in the imaginary worlds of *Dune* and *Harry Potter* respectively. In this study, real-world influences are found in the secondary world infrastructures, with space, characters and nature being the most explicit. The real-world Sahara desert, for example, is used as a terrestrial story location in the novella. The incorporation of such elements gives the world a sense of familiarity, which Wolf (2012) stated allowed readers to “relate to the imaginary world, especially to its characters and their emotions” (p. 33). Kennedy (2016) and Castleman (2017) made similar conclusions, suggesting that allusions to the real world evoked more recognisable and accessible imaginary worlds.

However, the findings of this study contradicts the findings of Likaku and Woods (2017), who concluded that familiarity of non-narrative structures was disadvantageous when depicting imaginary worlds. They found that such similarity to the real world prevented the depiction of a believable alternate reality in the imaginary world. However, this may be a matter of genre, as Likaku and Woods (2017) examined speculative fiction literature. According to Roine (2016) who

also investigated world-building in the same genre, speculative fiction specifically engages the audience through a depiction of reality that is “systematically different from our own” (p. 16). In other words, successful world-building in the genre of speculative fiction is achieved when similarity to the real world is reduced.

In answer to the third research question, the dynamic component of the storyworld forms the imaginary world of *The Little Prince* novella by revealing the world as the narrative progresses, through the narrator’s and the little prince’s backstories in the wide frame of the past, through the narrator’s and the little prince’s adventure in the events of the narrow frame, and through the afterstory in the wide frame of the narrator’s present.

The narrator and the little prince both have backstories that form the wide frame of the past. Their physical and mental events of the past consequently inform or affect their actions and behaviours in the narrow frame and the wide frame of the present. For example, in the narrator’s backstory, he gives up drawing because he feels discouraged by the grown-ups. This past event affects his behaviour in the narrow frame, as he recreates one of his childhood drawings instead of the little prince’s request for a sheep because he has no confidence in drawing anything else, having given up on drawing when he was a child. In the present, the narrator reveals that he has taken up drawing again, after meeting the little prince during the events of the narrow frame. It is thus through the narrative that changes occur and characters develop.

The findings from the third research question are similar to that of Leavenworth and Leavenworth (2017), who found the presence of different temporalities in the narrative of the novel *The Passage*. Likewise, they found that the events that occurred in the different temporal settings informed characters' actions and behaviours. The findings of this study are also similar to Mossner (2017) and Tyler (2015), who explored the psychological dimensions of characters in the novels *Ship Breaker* and *The Invention of Morel* respectively. They found that the description of the characters' mental states helped to increase readers' understanding of the imaginary worlds, as characters were affected by the environment in which they lived in. In other words, there is a connection between the characters' mental states and the imaginary world. In this study, the mental events of the characters provide information about the imaginary world as well. For example, in the wide frame of the past, the little prince watches an unusual shoot growing on his home planet with caution. His mental state of being cautious reveals that there is a dangerous aspect to his natural environment, which in this case, is the baobab plant.

While the secondary world infrastructures and the dynamic component of the storyworld were analysed separately in this study for a thorough analysis of non-narrative elements and the narrative respectively, both are interrelated and operate together to form the imaginary world of *The Little Prince* novella. For example, the extra-terrestrial locations of Asteroids

325, 326, 327, 328, 329 and 330 as formed by the secondary world infrastructure of space, are only revealed as the little prince travels from one to the next as part of his backstory in the narrative. In the same way, the narrative requires secondary world infrastructures such as space, time and characters to exist and progress; the story needs locations in which to take place, a temporal order for changes to occur, and inhabitants to carry out actions.

The discussion and conclusions of the findings show that the imaginary world of *The Little Prince* novella is formed using seven out of the eight types of secondary world infrastructures according to Wolf's (2012) framework. In other words, information of the world is provided from various aspects of its design, from space to philosophy, indicating an elaborate world despite its length as a novella. The world is also formed through the narrative that occurs within it, as information about the world and its changes are revealed through the unfolding of the physical and mental events in the past and present. The secondary world infrastructures and the dynamic component of the storyworld are interrelated, and work together to form the imaginary world of *The Little Prince* novella.

CONCLUSIONS

The types of secondary world infrastructures used in the imaginary world of *The Little Prince* novella were space, time, characters, nature, culture, language and philosophy. These infrastructures were found to form various components of the world that they

constitute together. The physical events and mental events were found to form the world through the narrative, revealing the world as the events of both the past and present wide frame, as well as the narrow frame unfold.

This study has demonstrated that even an imaginary world of a novella can be elaborate, being composed of various secondary world infrastructures which are interconnected with the narrative. This has implications for the type of works usually examined in world-building studies, where full-length novels are more privileged. This study has shown, however, that shorter works have as much to offer as full-length novels. Researchers should thus explore more imaginary worlds like this, which will widen the scope of “academia’s current purview” and enlighten current research (Proctor & McCulloch, 2016, p. 481).

Furthermore, this study has shown that the combined approach of analysing non-narrative structures and the narrative leads to a more holistic understanding of the imaginary world, as opposed to using a single approach that is solely focused on the former or latter only. This is because non-narrative structures and the narrative are interconnected and influence each other in the world-building process as argued by Wolf (2012) and as demonstrated in this study. This means that the analysis of non-narrative structures reinforces the analysis of the narrative, and vice versa. The combined approach as used in this study should thus be taken into consideration as a method for analysis in future world-building research.

In terms of creative writing, writers would find the concepts used to analyse the imaginary world of *The Little Prince* novella in this study helpful in the development of their own literary works. As writer and researcher Jeremy Scott (2016) stated, the practice of creative writing was a matter of world-building as “it is up to the creative writer to act as a guide” through the imaginary worlds that they created, “however small, however complex, keeping the reader’s engagement and interaction with the text in mind at all times” (p. 139). Content creators for other forms of media such as films and video games can also benefit from taking note of non-narrative structures and the narrative in the works that they create, as both influence each other in forming an engaging world, which will lead to greater viewer enjoyment.

This study has implications for education as well, particularly for teaching and learning literature. Incorporating the concept of imaginary worlds in teaching literature will not only increase enthusiasm among students but also enable them to have a “thorough understanding and appreciation of the central story” (McCredie & Howe, 2015, p. 8). In a project conducted to increase literacy learning, a team from the Macquarie ICT Innovations Centre developed a framework called ‘Weaving a Storyworld Web’, whereby teachers and students from three public schools in Australia designed an “online, multimodal StoryWorld created around a class novel or short story” (McCredie & Howe, 2015, p. 1). According to the researchers, the teachers

who participated in the project found higher levels of creative and critical thinking skills among the students as they collaborated in designing their imaginary world.

Researchers who are interested in further developing this topic might consider examining shorter literary works such as short stories. As this study has shown, *The Little Prince* produces quite an elaborate imaginary world, despite its length as a novella. A short story may be explored the same way. Another option would be transmedial worlds, which are imaginary worlds that can be accessed on different media platforms (Klastrup & Tosca, 2004). Investigating imaginary worlds from their various mediums would provide a greater wealth of information for analysis. Another theory researchers might use to study imaginary worlds is the Text World theory. This theory focuses on the cognitive aspects of world-building, and would provide a different perspective in analysing imaginary worlds.

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Shadow Projection in Adiga's *The White Tiger* and Ishiguro's *The Remains of the Day*

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ABSTRACT

This study compares shadow projection in two postcolonial novels: Adiga's *The white tiger* (2008) and Ishiguro's *The remains of the day* (1989). It takes these autobiographies as narratives of shadow and investigates how each protagonist projects his shadow in his narrative of servitude. The study draws on Carl Jung's view of shadow and shadow projection and holds an analytic and comparative methodology. The analysis focuses on the influential forces that shape each protagonist's shadow, while the comparison reveals psychosocial differences between them. The study tracks a line of psychological continuation between the two novels and concludes with psychological similarities that link the protagonists cross-culturally. Finally, it is concluded the detection of shadow projection is beneficial to character analysis, but it falls short at addressing the rhetoric-linguistic aspects of each novel.

Keywords: Adiga, Ishiguro, Jung, postcolonial, servitude, shadow projection

INTRODUCTION

Adiga and Ishiguro are Asian writers who write from the margins of their postcolonial contexts. This study compares the Indian novel, *The white tiger* (Adiga, 2008), with Ishiguro's *The remains of the day* (Ishiguro,

1989) from a psychosocial perspective. Despite their socio-cultural differences, these two novels share many interesting features which render the comparison quite fruitful. This study focuses on the theme of servitude which lies at the core of colonial encounter. The paper argues Adiga and Ishiguro present servitude at its two extremities: for Adiga's protagonist, servitude is depreciated, while for Ishiguro's it is appreciated. Adiga's protagonist sacrifices his master to gain individuality; Ishiguro's butler sacrifices his individuality to serve his lord. The Indian

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servant escapes servitude, while the British butler assimilates it. This paper interprets and analyzes these different behaviors based on Carl Jung's theory of shadow and shadow projection. It investigates the notion and function of shadow on both personal (psychology) and public (social) scales. While the personal dimension presents similarities between the two serving agents psychologically, the social side pinpoints differences between their socio-cultural contexts.

The questions of the study are:

1. How does each protagonist project his shadow?
2. What are the psychosocial forces that construct each protagonist's shadow?
3. How are global forces involved in the construction and projection of shadows, and how do they differ in different contexts?

To answer these questions, the study first provides a rather brief history of marginalization in both British and Indian societies, highlighting the differences as well as similarities. It then introduces Jung's view of shadow and shadow projection. Next, it reads servant-master relationship in the light of this frame and analyzes the different projections of Adiga's and Ishiguro's protagonists. In a separate part, the socio-cultural context of each novel is studied as it is treated by each novelist. The paper concludes by comparing the psychological as well as social findings together.

Marginalization in Britain and India

In their study of social class in Britain, Evans and Tilley (2017) argued that class division was a key element of Britain's political structure. For them, measures of class position were useful to the degree that they demonstrate "important relationships between social position and outcomes" (Evans & Tilley, 2017, p. 2-3). According to them, "Class has not disappeared: objective inequalities among classes, class identities, and ideological divisions between classes are unchanged. Britain remains a class-divided society" (Evans & Tilley, 2017, p. 191). Ishiguro's novel attends to the inequalities that occur due to social discrimination. The protagonist, Stevens, as a butler, was the offspring of Britain's classed hierarchies. Coming from a socially low-class father, Stevens fabricated his class identity by attaching himself to his landlord. However, he remains a marginal figure who was easily handed over along with the house from the previous lord to the new American gentleman.

Although Adiga and Ishiguro both came from ostensibly different geopolitical contexts, the history of British colonization of India interlinked them in an intricate way. Colonization is the meeting point between the British and Indian societies. As Mines (2009) contended, the structure of colonization deeply penetrated all aspects of an individual's life. The British distorted Indian practices and understandings by taking castes as "separate races with different essences or natural temperaments

and qualities” (Mines, 2009, p. 41). Thus, they assumed that caste and religion played a key role in the character of the population and were, for Indians, the fundamental bases for social organization.

Viewing Indian casts in the light of “their own cultural categories and understandings of class, [the British] attempted to identify and fix caste orders to create rational social categories they could count, characterize, and create policies about” (Mines, 2009, p. 37). Therefore, the fluid and locally disparate castes turned into fixed all-India categories and thereby created new social identities that Indians, in turn, shaped further. Caste increasingly became a basis for collective identity at a regional or even national level (Metcalf & Metcalf, 2006). Adiga’s novel attends to such caste clashes which eventually result in the formation of Balram’s shadow and shadow projection on both individual and collective levels.

LITERATURE REVIEW: SHADOW AND SHADOW PROJECTION

Jung (1971) regarded the shadow as the location for the hidden or repressed aspects of the self (Reeves, 2000). In Zweig and Abrams’s analysis, the development of the shadow occurs in every child naturally and in tandem with the development of the ego. The self develops out of the individuals’ identification with ideal personality characteristics which are reinforced by their environment; they bury in the shadow those qualities that do not fit their self-image. Therefore, the ego and the shadow create each other out of the same life

experience (Zweig & Abrams, 1991). While the self-image is constructed out of what is permitted expression by forces such as parents, siblings, peers, teachers, clergies, and authorities, the shadow comprises what is not permitted expression; it is, therefore, “mean-spirited, shameful, and sinful” (Zweig & Abrams, 1991, p. xvii). Bly (1991) used the metaphor of a bag which individuals unavoidably dragged by and was replete with the prohibitions imposed by their environments.

The shadow has been given different names such as the disowned self, the lower self, the dark twin or brother in the Bible and myth, the double, repressed self, alter ego, and id. It contains all the feelings and capacities that are rejected by the ego. However, not all of these are negative traits. For Frey-Rohn, “this dark treasury includes our infantile parts, emotional attachments, neurotic symptoms, as well as our undeveloped talents and gifts” (as cited in Zweig & Abrams, 1991, p. xvii). The shadow is negative only from the point of view of consciousness; it potentially contains values of the highest morality (Zweig & Abrams, 1991).

Tuby enumerates six ways in which the shadow gets activated in everyday life. These include exaggerated feelings about others, negative feedback from others, in impulsive and inadvertent acts, in situations when humiliation is experienced, in interactions one has the same troubling effect on several different people, in exaggerated anger about other people’s fault (as cited in Zweig & Abrams, 1991).

Whitmont (1991) defined the shadow as that part of the personality which had been repressed for the sake of the ego ideal. He further contended, "Since everything unconscious is projected, we encounter the shadow in projection – in our view of 'the other fellow'" (Whitmont, 1991, p. 12). Shadow projection occurs because the shadow resists conscious awareness and it is uncomfortable to acknowledge. In Reeves's words, projection "occurs when one sees in another aspects of one's own shadow" (Reeves, 2000, p. 81). Therefore, in shadow projection, the shadow is seen quite indirectly, "in the distasteful traits and actions of other people, *out there* where it is safer to observe it" (Original emphasis; Zweig & Abrams, 1991, p. xviii). Shadow projection, as an unconscious outlet, is inevitable because as an aspect of the self, the shadow demands expression (Jung, 1971). As defined by W. A. Miller, projection is "an unconscious mechanism that is employed whenever a trait or characteristic of our personality that has no relationship to consciousness becomes activated" (W. A. Miller, 1991, p. 39).

For Jung (1971), projections involve emotions. It manifests itself in one's intense reaction to a quality in an individual or a group. When this reaction overtakes the individual with great loathing or admiration, it may be the shadow showing. In Zweig and Abrams's words, "We *project* by attributing this quality to the other person in an unconscious effort to banish it from ourselves, to keep ourselves from seeing it within" (Original emphasis; Zweig &

Abram, 1991, p. xviii). Seen as causing pain, anger, or shame, the other is then regarded at fault and reprehensible.

Projections involve emotions and personal characteristics. In projecting one's shadow, the individual attributes one's inferior trait to another person. In Whitmont's analysis, a projection invariably blurs one's view of the other person. Even when the projected qualities happen to be real qualities of the other person, "the affect reaction which marks the projection points to the affect-toned complex in *us* which blurs our vision and interferes with our capacity to see objectively and relate humanly" (Original emphasis; Whitmont, 1991, p. 13).

Whitmont examined several kinds of possible reactions to the shadow; these included denial, elimination, evading the responsibility for it, and constructive acceptance (Whitmont, 1991). Upon being refused, the shadow exerts its power in a negative, compulsive projected form. This results in an increasing separation of the individual from the surrounding world; instead of a real relation to the world, only an illusory one is formed which is the outcome of the individual's projections. In the power struggle between the ego and the shadow, the former attempts to eliminate the latter. The ego's attempts are in vain because the shadow "represents energetically charged autonomous patterns of feeling and behavior" and this energy "cannot simply be stopped by an act of will" (Whitmont, 1991, p. 17). Discipline and repression are two ways of exerting

control over the shadow. Discipline runs in contrast to feelings and repression leads to irresponsible act (Whitmont, 1991).

If the projectors have power, they can use that power to harm the target of their projections. Projectors may justify their projections, but the projection itself occurs unconsciously as an escape from self-awareness (Jung, 1971). This study approaches Adiga's and Ishiguro's novels as biographies of the protagonists' shadows rather than of their selves. For this, the paper relies on von Franz's idea that,

The shadow plunges man into the immediacy of situations here and now, and thus creates the real biography of the human being, who is always inclined to assume he is only what he thinks he is. It is the biography created by the shadow that counts (as cited in D. P. Miller, 1991, p. 21).

METHODS

This study is both analytic and comparative. It focuses on the theme of servitude in each novel and investigates how the autobiographers-protagonists relate to their masters. The study concerns itself with the shadow projection of each protagonist as it manifests itself in their different scapegoatings. It first scrutinizes each novel separately and then compares them together in Discussion. Therefore, Analysis comprises two parts.

The first part deals with Ishiguro's *The remains of the day*, the protagonist of which, Stevens, stands as a butler first to the British Lord Darlington, and then to Mr. Farraday, an American gentleman. Stevens's butlership is mostly formed and spent under the lordship of Darlington whose codes of a British colonial gentleman stand as disciplines for Stevens. There are three main relationships via which Stevens constructs his ideal ego and avoids his shadow: Stevens-Lord, Stevens-Miss Kenton, and Stevens-his father. While Stevens-Lord relation represents his collective shadow projections, his relations with his father and Miss Kenton stand for his relatively more personal projections.

The second part is concerned with Adiga's *The white tiger* whose protagonist, Balram, projects his shadow in social interactions with his Americanized Indian master, Ashok. Balram's servitude to his master is mostly conducted through psychoanalytic strategy of repression. His autobiographical narrative includes many repressive forces in his psychosocial environment, the prominent of which are his Indian family, his school, and his workplace. The study investigates how Balram's repressed feelings and behaviors under these forces find expression in his master-servant relationship. The comparison of the findings of each part constitutes Discussion of the paper.

ANALYSIS

This part consists of two main sections and each section focuses on one novel.

Ishiguro: *The Remains of the Day*

Ishiguro's novel is narrated through Stevens's first-person point of view. The whole story reads like an autobiographical narrative which recounts the narrator's lifelong dedications to his master(s). Shaffer (1998) provided a detailed analysis of the psychic mechanisms of Stevens's political and sexual repressions. His study focused just on the mechanisms of repression, whereas here the emphasis is on the way(s) all those repressions get projected onto others. Mechanisms of his shadow projections can be studied in his main socio-cultural interactions.

Stevens - Lord. Stevens's servitude to Lord Darlington constitutes the core of his psychosocial interactions. His relation to his master is one of devotion. He takes Lord Darlington as his cultural or class father (Shaffer, 1998). Being born to a socially lower class family can well justify his shadow projections onto a male master whom he takes as an ideal master. He comes from a low class of society which is stricken by social humiliation, shame, depravity, and a strong sense of inferiority. What he tries to construct for himself, his audience, and his master(s) is the ideal ego of a devoted servant. However, this ideal ego is cast at the cost of repressing the shame of his class inferiority.

Avoiding depravity and powerlessness, he seeks sources and means of achieving greatness. His ambition for greatness, therefore, feeds on his repressed sense of shame. Lord Darlington is the other

onto whom Stevens projects his repressed longing for power. In Stevens's psychic mechanism, he has the role of a perfect master. Stevens feels devoted to him to the extent that he sacrifices his personal life for achieving ideals of servitude. The more he gets near to Lord, the more he feels empowered and secured, and the more his sense of inferiority is appeased.

His shadow projection is a case in which the projection holds and a tight relationship is constructed between the sender and the receiver of the projection. Stevens's admiration for Lord Darlington indicates his own shadow showing. He projects by attributing greatness to Lord in an unconscious effort to banish its lack (inferiority) from himself, to keep himself from seeing it within. In this attribution, he goes so far as thinking Lord as an infallible man. To Mr. Cardinal, who tries to convince Stevens of Lord's being manipulated by Germans, Stevens states, "I have to say that I have every trust in his lordship's good judgement" (Ishiguro, 1989, p. 153).

No wonder does Stevens's narrative center on greatness, dignity, and honor – the very codes of lordship. For him, greatness has a political and a psychological significance. Important political figures "in whose hands the destiny of civilization truly lies" (Ishiguro, 1989, p. 136) stand for greatness. In attaching himself to these sources of greatness, Stevens forgets/represses his sense of inferiority. The world he creates for himself is a delusory one wherein his true position as an exploited servant is blurred. Psychologically, greatness

lies in emotional self-restraint (Ishiguro, 1989). Self-restraint means discipline which is a psychic strategy through which the ego exerts its control over the shadow. Stevens's autobiographical narrative is a narrative of discipline which moulds his ideal ego and banishes his shadow to the dark recesses of his psyche. In master-servant relation, self-discipline means eradication of the personal dimension of his life. Stevens's narrative reveals quite few details about his personal life. He is mostly seen interacting with lords, peers, and subordinates only as a butler; the same accounts for his belief in professionalism as a butler.

Stevens's strict self-discipline turns him into a professional butler and helps him define "dignity" in his own way. He compares "dignity" to a gentleman's suit which "he will not let ruffians or circumstance tear . . . off him in the public gaze" (Ishiguro, 1989, p. 29). This notion of dignity gives the least space to his shadow which thus remains repressed by the ethos of discipline as propagated in lordship system. Stevens's blindfold admiration for Lord Darlington and all the sociopolitical cognates his lordship has obliquely shows his shadow marked with inferiority and humiliation.

Stevens - His Father. Stevens's self-discipline makes him censor the emotional dimension of his relation with his father. He avoids any emotional disclosure. He praises his father, an under-butler, from the eyes of a professional butler, not from the eyes of a son. He worships dignity in his father but

it lasts as long as his father does his duties quite well. From the time errors are seen in him due to aging and being senile, he averts from him, "even the brief exchanges necessary to communicate information relating to work took place in an atmosphere of mutual embarrassment" (Ishiguro, 1989, p. 43). Such rare occasions show his shadow is filled with embarrassment and shame because in his father's senility he finds that repressed sense of humiliation and inferiority he has taken pains to escape from. Substituting Lord Darlington as his father with his natural father is the psychic mechanism, he adopts to evade his dark shadow.

All through his narrative, he happens to enter his father's personal room only two times: once, for informing him of the cut down on his duties due to his errors; and the second time he appears on his deathbed. On the night his father lies dying, Stevens prefers serving Lord's important guests downstairs to staying at his death chamber. Upon his father's repeatedly stating, "I hope I've been a good father to you" (Ishiguro, 1989, p. 67) which implicitly calls for Stevens's emotional and intimate involvement, Stevens suffices to say, "I'm so glad you're feeling better now" (Ishiguro, 1989, p. 67). The response is an evasion from this personal involvement. Stevens thus continues to stick to the codes of dignity and professionalism until the last breath of his father.

Stevens - Miss Kenton. In his relation with the housekeeper, Miss Kenton, Stevens

adopts the same professional profile as he has with his father. Even after twenty years of separation from her, he thinks of her as a professional solution (Ishiguro, 1989, p. 32). In their “cocoa evenings, while maintaining their essentially professional character”, he allows “room for a little harmless talk” about the staff, important meetings and conferences at the Hall, or some guests (Ishiguro, 1989). Not only does he avoid revealing his emotional involvement, but he also relates how he evaded her temptations. His personal room is invaded two times by Miss Kenton in an attempt to strike more intimacy with him, and each time, he sticks to his professionalism and code of dignity to escape her. Once, she intrudes upon him with a vase of flowers, stating, “I thought these would brighten your parlour a little” (Ishiguro, 1989, p. 34). Stevens reacts to this quite coldly, “But this is not a room of entertainment. I am happy to have distractions kept to a minimum” (Ishiguro, 1989, p. 34).

In her second intrusion upon his privacy, she catches him reading a sentimental love story, a book that she gets hold on only after she corners him (Ishiguro, 1989). He then justifies his choice of this book has been to get a better command of English language (Ishiguro, 1989). Psychologically, however, the book shows his repressed desires and emotions that he allows expression only through reading.

Also, two times he remembers having stood before the closed door of her parlor while she was crying inside. Once, she receives the news of her aunt’s death. The

thought of Miss Kenton crying “provoked a strange feeling to rise within me, causing me to stand there hovering in the corridor for some moments” (Ishiguro, 1989, p. 119). The rise of “a strange feeling” within him indicates the rise of his repressed emotions which he immediately controls; he decides to wait for another opportunity to express his sympathy (Ishiguro, 1989, p. 119). The second time that he stands alone before her door is on the night, she has to announce her decision about her acquaintance’s proposal. To this, Stevens reacts quite coldly and indifferently, dismissing her for “events of a global significance are taking place in this house at this very moment” (Ishiguro, 1989, p. 148).

Adiga: *The White Tiger*

The white tiger deals with the issue of servitude in an Indian modernized context. Studying the discourse of entrepreneurship in the novel, Haitham (2013) represented how the individualism of this discourse ran in contrast to the ethos of collectivism in an Indian context. Al-Dagamseh (2013) reinscribed the novel within the context of global neoliberal capitalism and argued how this novel took issue with the globally hegemonic discourses of success and story narratives. While most of the readings focus on the socio-cultural aspects of the novel, the psychosocial dimension has received relatively less attention. This study focuses on three important social environments which expose the protagonist, Balram, to repressive forces

Balram's Family. Adiga's family is a typical one of poverty-stricken families in India. Poverty makes individuals repress many unaffordable desires. Balram grows up in such a family which is also caste-ridden. Although caste is one of the determining factors in an Indian context, in Balram's time it has paled away under the force of money. He puts his father, a rickshaw-puller, among those who "had not had the belly to fight" (Adiga, 2008, p. 38). Of the two groups, "Men with Big Bellies, and Men with Small Bellies", his father belongs to the latter, doomed to "get eaten up" (Adiga, 2008, p. 38).

The leading figure in Balram's family is his granny, Kusum, "every son and daughter-in-law lived in fear of her" (Adiga, 2008, p. 11). Kusum proves to be an exploitative force in their family. She deprives Balram of education. At her behest, he is taken from school and put at a tea shop to work. She decides that he become a car driver and pays for his driving sessions. When he finds the job as a servant to Ashok, she forces Balram to send his wages to her (Adiga, 2008). When he stops sending her money, she threatens him and then sends his cousin, a boy of ten, to him to Delhi to be taken care of. When Kishan, Balram's brother, marries, Kusum gets hold of the dowry the new wife brings to the family, the Hero cycle, and the thick gold necklace (Adiga, 2008).

Balram's repressed and repressive family has an important share in constructing his shadow. Comparing life in Dark India to a Rooster Coop, Balram speaks of the Indian family as the major factor that gets people

"trapped and tied to the coop" (Adiga, 2008, p. 104). The structure of the family sacrifices autonomy and individualism for the sake of the whole family. Therefore, what constitutes Balram's shadow is his desire to live and be treated as an individual. He knows costs for procuring individualism are quite heavy, "only a man who is prepared to see his family destroyed – hunted, beaten, and buried alive by the masters – can break out of the coop" (Adiga, 2008, p. 104).

The first time Balram projects his shadow is when he returns to his village in a khaki uniform and his master's Honda City. Not submitting to Kusum's decision about his marriage, he rebels and walks out of the house. He loathes his own people because he projects onto them the depravity, submissiveness, dirt, misery, and slavery that are part of his own shadow. In ignoring and rejecting them, he tries to distinguish himself, and escape from them who embody his loathsome alter self. His disgust blurs his world vision and makes him react inhumanly.

Leaving his family, he goes to the Black Fort; there, he identifies with Iqbal's Devil who rebelliously says "No" to God's servitude and goes mad with anger. Balram's anger is another show of his shadow projection through which he attributes all the mean qualities of servitude and dependence to his family and banishes them forever from his life vision, "I see the little man in the khaki uniform *spitting* at God again and again" (Original emphasis; Adiga, 2008, p. 53). In rejecting and driving past his family, Balram's anger projects his helplessness

onto them and thus claims his individualism. This anger finds its expression in his act of spitting (Adiga, 2008, p. 26).

Balram's Workplace. Balram starts working in his master's house as a driver and a servant. Here, Balram is treated in the most inhumane manner. Ashok's brother, the Mongoose, has the same role in his workplace as his granny, Kusum, has in the family; he is like her mean and stingy. He insults Balram and accuses him of stealing a rupee coin he lost while getting out of the car. He degrades Balram and makes him feel like an animal, "I got down on my knees. I sniffed in between the mats like a dog, all in search of that one rupee" (Adiga, 2008, p. 80).

The inhumane way in which Balram is treated marks his shadow with strong senses of anger, shame, humiliation, and degradation. The main source of these negative and destructive feelings is the widening gap between the rich and the poor. Ashok lives in a new apartment called Buckingham Towers A Block which is one of the best in Delhi, while the servants are pushed downstairs and locked up in damp, dark, and dirty rooms in the basement. Ashok spends a lot of time visiting malls along with his wife and his brother; and Balram should wait outside the malls ready to carry their shopping bags. They humiliate and laugh at him for mispronouncing some words such as pizza and mall (Adiga, 2008). They call him "half-baked" because "He can read and write, but he doesn't get what he's read" (Adiga, 2008, p. 7). On Pinky

Madam's birthday, Balram is forced to dress up like a maharaja with a red turban and dark cooling glasses and serve them food (Adiga, 2008). When Pinky kills an Indian man in drunken driving, Balram is first coaxed then threatened into taking the full charge (Adiga, 2008). Such social discriminations imbue a sense of degradation and humiliation in him which finally erupts when his shadow projects itself onto his master and makes him slit his throat on the road.

The act of killing Ashok is not a shadow projection, because it has been pre-planned by Balram and is therefore an act of will. But in the sense of freedom he feels, he is actually projecting his long repressed shadow onto Ashok in compensation for all the humiliations and depravities he has suffered in his life, "I was blind. I was a free man" (Adiga, 2008, p. 173). Killing Ashok, Balram feels free to become a master like him, an entrepreneur, who like him bribes, exempts himself from murder, and despises others. Having killed Ashok, he projects his thirst for power and control onto him, blames and condemns him to death, and thus banishes that sense of mastery from himself. In this way, Ashok plays the role of a scapegoat for him.

Balram's role changes after the murder incident, "Once I was a driver to a master, but now I am a master of drivers" (Adiga, 2008, p. 182). He has a contractual relationship with his drivers and enacts an employer-employee interaction "I don't treat them like servants – I don't slap, or bully, or mock anyone. I don't insult any of them ... I'm their boss, that's all" (Adiga, 2008, p.

182). The claim that Balram finds his own shadow in Ashok can well be supported by analyzing two car accidents he narrates in his autobiography. In the first, he is a servant who is forced to take full responsibility of the car accident Pinky Madam has caused while she was drunk (Adiga, 2008). He finds himself a cornered, helpless creature forced to play the role of a scapegoat for his master. In the second accident, he is the master who in complicity with the police corners the brother of a boy who gets killed in an accident by one of his drivers (Adiga, 2008). The car scene gets manipulated by the police so that some unknown person becomes the scapegoat (Adiga, 2008, p. 186). Ashok and his family bribe politicians to escape taxes; similarly, Balram bribes the police to survive accidents and continue his entrepreneurial business. This draws lines of comparison between the two, making each shadow of the other.

DISCUSSION

This study analyzes the process of shadow projection in the protagonists of two completely different novels. Balram's caste-ridden Indian context intensifies his demarcation. He is humiliated not only for his race but also for his caste. These elements directly influence the shadow that he unconsciously constructs in his social interactions especially with Ashok. By contrast, Ishiguro's protagonist is mostly exposed to social discrimination in which his shadow emerges out of the class distinctions he suffers from in the house of Lord Darlington.

Ishiguro's *The remains of the day* displays how the butler's shadow projection onto his master draws the former's admiration for the latter and thus guarantees lifelong servitude. But Adiga's *The white tiger* narrates how the servant's shadow projection onto the master leads to the master's murder. It thus stands in opposite direction to Ishiguro's narrative of loyalty. Stevens is attracted towards Lord Darlington for bearing codes of greatness and dignity. Far from confronting his real position as a mere manservant to Lord, Stevens seeks to link himself with sources of power and influence. He is blind to the way he is exploited by Lord; his infatuation with greatness makes him unaware of being deprived of his human needs as an individual and the personal side of his life. He claims mastery over his subordinates because he feels he is closer to the source of greatness.

Adiga's protagonist is, by contrast, not blind to his real situation with respect to Ashok. What he is blind to is his having nurtured all the qualities he despises in his master such as bribery, thirst for power and domination, dishonesty, and exploitation. All these qualities get manifested in the second phase of his life when he becomes a master.

While Stevens sacrifices his personal life at the cost of serving dignity and socio-political greatness, Balram sacrifices his family at the cost of gaining power and individualism. Stevens is a prejudiced English man who like his master takes up a paternalistic attitude towards others. He serves a colonial lord, a relic of Victorian

lordship system, and all the behavioral and social codes that are attached to the lord. Thus, like his lord, Stevens has a paternalistic, anti-Semitic, classed, and gendered perspective. His life story shows how internalization of codes of lordship makes him blind to the exploitation he is forced into. He cries at the end of his narrative when he realizes all his honest loyalty has reached him to the status of being “part of the package” (Ishiguro, 1989, p. 164) when the Hall is transferred to an American gentleman. Stevens’s loyalty to his lord displays how the self gets assimilated into the dominant ethos of lordship, colonialism, and exploitation. Stevens’s story goes so far as showing how the self sacrifices, and represses the longing for, individualism in its shadow, so that even when left alone, it cannot think of anything other than the assimilating agent, the British lord or the American gentleman.

Ishiguro’s novel shows the gradual change from British colonialism to American imperialism. Mr. Farraday comes to Stevens’s life with a claim to autonomy. He lets him take a tour alone and enjoy the beauties of his country; when Stevens mentions Miss Kenton, Mr. Farraday’s immediate reaction is to take her as his “lady-friend” (Ishiguro, 1989, p. 11). This erotic freedom is against the professional and highly conservative outlook Stevens has secured for himself under Lord Darlington. Furthermore, with Mr. Farraday, Stevens realizes he has to learn the skill of bantering if he wants to serve him with dignity. Therefore, instead of breaking away from

ties of exploitation, he decides to remain faithful to Mr. Farraday just as he was to Lord Darlington.

Adiga’s novel is situated in an Indian context wherein the inherited British system of servitude has already been influenced by American ethos. The India Balram describes and lives in is an Americanized India which witnesses cultural clashes between Western individualistic and Eastern collectivist outlooks. As Iyengar and Lepper’s (1999) study shows, American culture stresses individualism whereas Asian cultures emphasize collectivism. In the American culture, people tend to feel volitional and autonomous while making their own decisions; but the Asians may feel more volitional and autonomous when they endorse and enact values of those with whom they identify (Deci & Ryan, 2000). Balram’s longing for entrepreneurship reflects his being assimilated into the American codes of individualism which have dominated India’s markets at that time. This tilt marks his distance from his Indian collectivist culture with its emphasis on family. However, all through his narrative, he is well aware of the connotations his choice has within an Indian culture. Being aware that his venture to kill Ashok would lead to the total destruction of his family by Ashok’s family, he calls himself, a “virtual mass murderer” (Adiga, 2008, p. 27).

Unlike Stevens, Balram is an angry, disloyal servant who blames his society and environment for his sufferings. Arguing he comes from Dark India marked with poverty, unemployment, depravity, and humiliation,

Balram justifies his rebellion against his master. Yet his shadow projection identifies him with the very master he has killed. The same applies to Stevens. All through his narrative Stevens attaches himself to sources of power and greatness and shuns away from humiliation, exploitation, and depravity a manservant experience. In all of his socio-cultural interactions he adopts and enacts the same policies as his lordship. Only at the end is he given a glimpse of what his real position has been and will be at Darlington Hall.

As stated above, Bly (1991) compared metaphorically the shadow to a bag which was dragged by the individual and replete with environmental prohibitions. Stevens can be claimed to bear his bag full of self-humiliations in which he ignores his self and sense of individuality; in the narrative of his shadow, he projects his authoritarian master onto himself, escaping the realities of his servitude. By contrast, Balram's bag is full of other-humiliations in which he ignores others for securing his sense of individuality. The narrative of his shadow shows how he projects his shadow onto the master who thus plays the role of a scapegoat.

Stevens's story of exaggerated servitude makes the novel a postcolonial narrative of colonial assimilation. The vanity of dignity, greatness, and honor which form the basis of Stevens's butlership is well exposed to critique and derided, when Ishiguro makes his protagonist doubt his biased definitions which have cost him long years of servitude. Although his decision to serve Mr. Farraday

marks no change in his outlook, Stevens is given a glimpse of his real position at Darlington Hall. The glimpse arouses fear and remorse in him which are immediately repressed by the self who decides "to be in a position to pleasantly surprise" the new master (Ishiguro, 1989, p. 166).

Similarly, Balram's narrative is an instance of postcolonial crime fiction. His crime becomes the means through which Adiga targets the sweeping wave of Americanization and its imperializing neoliberalism. Balram's narrative can serve as the psychological continuation of Stevens's blindfolded admiration for the master. Stevens's loyal servitude turns into Balram's disloyal act of crime. By killing Ashok, Balram tries to kill the master in himself but in vain. That inward urge to dominate and control others remains working in Balram just as it does in Stevens.

CONCLUSION

Ishiguro's and Adiga's novels are narratives of shadow projection on both individual and collective levels. Individually, they are fictional figures constructed out of the psychosocial discourses to which their writers respond. The exposure accords them a collective angle as well. On the collective scale, class discrimination is the common ground addressed by the deprived class. This discrimination gets a race-and-caste base in Adiga's novel. Ishiguro's hybrid identity as a Japanese-British writer gives his treatment of a British servant a latent race-based dimension.

Therefore, Balram's self-oriented shadow projection for securing his individual identity can embody the classed and racialized psychosocial reactions to the local and global socio-political demands. Stevens's other-oriented projection may justify the spirit of psychosocial submissiveness which reinforces the enduring hold of the dominant self.

Focus on shadow and shadow projection proves beneficial to character analysis. However, it falls short at addressing the novels' narrative and rhetorical strategies that may contribute more to character analysis. Stevens's good command of English language and Adiga's ironical tone are not attended to by this approach.

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The Specter of Narration and Hypocrisy in Albert Camus' *The Fall*

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ABSTRACT

In this paper, I explored what Sartre referred to as Camus' 'most beautiful and least understood novel,' *The Fall*. As a methodology, I applied textual hermeneutics to immerse in the text and got out of it what I deemed as the crux of its existentialism as founded in the two-in-one leitmotif of narration and hypocrisy. In Clamence, there was a profound need – a specter that lingered and haunted – to narrate his life, especially the fall that triggered it and the judgment that allowed him to do it. I argued then that the nature of the text reflected a deep sense of narration that stemmed from hypocrisy, in which Clamence branded himself as 'judge-penitent' – what such a life entails, how it freed him, and how it mirrored life-callings or vocations in all walks of life.

Keywords: Camus, existentialism, hypocrisy, laughter, narration, *The Fall*

INTRODUCTION

Specters, Falling and Hypocrisy

It was a heyday in the time of Marx to broadcast that there was a specter of communism haunting Europe, but the specter that haunted in *the Fall* was another one. It is not simply the opposite or the anti-communism where Camus took an ambivalent association (Judt, 1998). Instead,

it was Camus' stepping aside of this specter as seen in his dislike when he saw the 'mirror of his own discomfort,' a kind of falling short always in confronting what is expected. Camus conceived of a cosmopolitan or rootless existence, seeing life absurdly as an exile and the futility of grounding oneself in a firm position in it (Judt, 1998). In *La Chute* (*The Fall*), one can reflect the life of Camus in Jean-Baptiste Clamence, the main character:

Camus took his own failings as he saw them, generalized them across the spectrum of Parisian intellectual life, and then subjected them to

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cruel inspection and interrogation in the manner of his own intellectual enemies. By the end of the tale it is no longer easy to distinguish between Camus/Clamence and his/their antagonists, much as Camus himself could no longer always see clearly which was his actual self and which the one with whom he sought a passing identification. (Judt, 1998, p. 104).

Albert Camus' soul-baring character in Clamence represents duplicity in the fate of a successful individual, the spotlight, as it was, projected but not without a shadow. In *The Fall*, Clamence in his zenith in Paris as a lawyer saw individuals as projections of shadowy outlines. He described for example how their lives were described as shadows, or more accurately, silhouettes without a subject and thereby always passing. Clamence analogized that "Paris is a real *trompel'oeil*, a magnificent stage-setting inhabited by four million silhouettes" (Camus, 1991, p. 5). It is noticeable to point that the specter that represents the failures of humanity signifies the inherent essence, or lack thereof, of modern man's inhibitions and irresponsibility. In the novel, Camus spoke as Clamence when he generalized the human condition in modernity. "A single sentence will suffice for modern man: he fornicated and read the papers" (Camus, 1991, p. 6). And this does not exempt Camus when he "reduced himself to silence by his refusal to take sides in the Algerian

imbroglio and thus stood apart from the most divisive and morally wrenching crisis of postwar France" (Judt, 1998, p. 21). This gives an ambivalent account on how Camus in Clamence managed to speak of an existentialism that tried to explore a prosperous life when as he spoke, the specter of his duplicity manifested.

This specter of duplicity roams around the text, a perplexity held at bay in the identity of Clamence. *La Chute* (The Fall) reveals an ironic confession from a man who spoke about justice to a man who prefers something else from it (Foley, 2008; O'Brien, 1970). For Ellison (2007), *La Chute* is an 'enigmatic text' that cannot be condensed to simple representations, a text that requires the reader to work. Maurice Blanchot,

In the course of a highly perceptive essay on *La Chute*, refers to Camus's text as *cette confession dédaigneuse*, a paradoxical designation for a text that pretends to be the disclosure of a single and particular life, but which is in fact an infinitely evasive *alibi* that forever forestalls an identification of its true source. (Blanchot, 1971, p. 231; Newmark, 2008, p. 108, Italics mine).

That is to say, the withholding of identification is terminal as well as opaque. It is no wonder that Sartre himself refers to *La Chute* as "perhaps the most beautiful" but also "the least understood" (Aronson, 2004, p. 5).

METHOD

Although *The Fall* (Camus, 1991) took its cue from a Christian terminology following the Genesis account, as in Milton's *Paradise Lost*, it also pinpointed to the moment that a literal specter, a woman dressed in black in the railings of a bridge at midnight, fell in the water. This happened ironically when rain was also falling. The scene was vividly narrated by Clamence when after valorizing himself as a successful man, he finally took courage in expressing his very own specter: the hypocrisy he could not withstand but narrated. To quote at length the *fall*:

It was an hour past midnight, a fine rain was falling, a drizzle rather, that scattered the few people on the streets. I had just left a mistress, who was surely already asleep. I was enjoying that walk, a little numbed, my body calmed and irrigated by a flow of blood gentle as the falling rain. On the bridge I passed behind a figure leaning over the railing and seeming to stare at the river. On closer view, I made out a slim young woman dressed in black. The back of her neck, cool and damp between her dark hair and coat collar, stirred me. But I went on after a moment's hesitation. At the end of the bridge I followed the guys toward Saint-Michel, where I lived. I had already gone some fifty yards when I heard the sound—which, despite the distance, seemed dreadfully loud in the midnight

silence—of a body striking the water. I stopped short, but without turning around. Almost at once I heard a cry, repeated several times, which was going downstream; then it suddenly ceased. The silence that followed, as the night suddenly stood still, seemed interminable. I wanted to run and yet didn't stir. I was trembling, I believe from cold and shock. I told myself that I had to be quick and I felt an irresistible weakness steal over me. I have forgotten what I thought then. "Too late, too far ..." or something of the sort. I was still listening as I stood motionless. Then, slowly under the rain, I went away. I informed no one. (Camus, 1991, p. 23).

This scene disturbed Clamence and imbalanced the equilibrium of his affluent life. For the methodology of this paper, I exposed this specter as the two-in-one leitmotif of narration and hypocrisy. To do that, I employed textual hermeneutics to immerse in the text and got out of it what I deemed as the crux of its existentialism as found in the two-in-one leitmotif of narration and hypocrisy. Underlying the presupposition of this leitmotif was the epitome of laughter as the in-built two-facedness stemming from one's existence.

RESULTS AND DISCUSSION

There are several vantage points from which the story can be positioned. The existing literature on the novel explored

the concept of innocence (Viggiani, 1960), guilt (Demeterio, 2008; Royce, 1966), and despair (Wheeler, 1982). All of which are clear pathways by which one can immerse well in the text. The theme of innocence dispels the enduring dignity of man whence after the fall, he can no longer view himself as the immaculate image out of the blissful state from which he derived his honor. Clamence said, "Tell me, *mon cher compatriote*, doesn't shame sting a little? It does? Well, it's probably shame, then, or one of those silly emotions that have to do with honor" (Camus, 1991, p. 22). The exposition of guilt suggests a very important distinction in the acts that warrant such honor, seeing the crucial element when after spending enough time recovering from a mistake, it still resonates in the entirety of one's life. Clamence says that "we cannot assert the innocence of anyone, whereas we can state with certainty the guilt of all" (Camus, 1991, p. 34). Despair too, the cessation of hope, seems to be a viable disposition in the idea that it would always be too late to do anything over one's guilt and lost innocence.

The initial characteristic of this hypocrisy was pictured by Ellison (2007, p. 180) that "in the universe of *La Chute* a mask seems merely to hide more masks." The paradox is precisely when in the supposed revelation of identity, there is still another façade standing in the way. And this occurs almost in a way as if hypocrisy begets itself. Clamence pointed this out when he said in his introductory conversation with the reader that his "profession is double...

like the human being" (Camus, 1991, p. 6), implying that the nature of man was a two-sided face. He said, "that's the way man is, *cher monsieur*. He has two faces: he can't love without self-love" (Camus, 1991, p. 13). The deeper level here is that it is not just about the physiognomy but also about being forever split in life that is at work. In this sense, men are living in a double – or in Clamence's words: "they are here and elsewhere" (Camus, 1991, p. 7). Clamence's existence finds a closer description of an unquenchable status: "I was at ease in everything, to be sure, but at the same time satisfied with nothing" (Camus, 1991, p. 12).

The most explicit formulation of Camus regarding hypocrisy finds exposition in Clamence's assertion that "No man is a hypocrite in his pleasures" (Camus, 1991, p. 22). Although Clamence asked whether the words were his or borrowed from someone else, the formulation still struck through the essence of what he was trying to say. The same formulation however is, to consider his borrowing, a phrase originally found in Samuel Johnson. It is explained in James Boswell's biography of Johnson that "the real character of a man was found out by his amusements" (Boswell, 1833, p. 392). Therein lies an entry into the enigma that hypocrisy holds. Hypocrisy touches the psychoanalytical nature of desire and paradoxically reveals man's vocation. Such a paradox of vocation, however, necessitates its comical calling – the calling of judgment *as the specter that laughs.*

**'Let Them be a Fan of Laughter':
Judgment as the Specter of Narration**

Plato wrote that in the training of the guardians, Socrates ironically avered of a serious subjunctive: "let them not be a fan of laughter" (Plato, 1968/1991, p. 66). Bolaños (2017) expounded on the responsible use of poetry and fiction in Plato's *The Republic* and *The Laws* and argued on a critical assessment of the roles narratives played in the education of rulers. This seriousness is, however, a spot for a joke when Clamence noticed that the reader laughed at the subjunctive (Camus, 1991, p. 5). Laughter in *La Chute* is Clamence's constant reminder that not only is his disposition a joke after the fall on that night, but that it is also the specter of hypocrisy, the principal calling of something that he cannot escape. The calling is ultimately the judgment of his life that befalls on him. In the novel, laughter is becoming the inevitable consequence of his doing or undoing of his life, forever seated at the trial of judgment. It reverses Clamence's perspective of his successful life and brings into it a crisis from the fall of the woman – the suicide he neglected. Quite evidently, "in Clamence's case, falling relates to the important and pervasive theme of laughter in the novel" (Ellison, 2007, p. 186). His pristine state inexorably faces demise and puts himself at the verdict of his life.

During his Parisian *Eden* state, Clamence's life reflects a lifestyle of evading any form of sentencing: "it's a matter of dodging judgment, of avoiding being forever judged without ever having a sentence pronounced" (Camus, 1991, p.

25). This practice of avoiding judgment is done swiftly. It can be described as a way of drawing attention to oneself in the high ground to belittle or assume the character of a magistrate, playing judge and jury over others. Clamence noticed this lifestyle when he said that "people hasten to judge in order not to be judged themselves" (Camus, 1991, p. 26). Incidentally, this makes a lot of room for the laughter that the nature of judgment propounds. The status of judgment as a *conditio sine qua non* hits everyone and without escape the whole notion of integrity and authenticity. In the text, the spectrality of narration finds haunting expression in the laughter of judgment that has followed Clamence.

I straightened up and was about to light a cigarette, the cigarette of satisfaction, when, at that very moment, a laugh burst out behind me. Taken by surprise, I suddenly wheeled around; there was no one there. I stepped to the railing; no barge or boat. I turned back toward the island and, again, heard the laughter behind me, a little farther off as if it were going downstream. I stood there motionless. The sound of the laughter was decreasing, but I could still hear it distinctly behind me, come from nowhere unless from the water. (Camus, 1991, p. 14).

Here, judgment has the final laugh not because it takes form in legalities and normative rulings in society, but because

it torments like a specter those who have committed their favorite sin, their Achilles' heel. In short, judgment targets those who also experienced personal falls, which is quite interestingly a laughable thing. Ellison writes that "to fall in front of one's fellow humans is to lose face, to cease being superior and to become the mere object of someone else's amusement" (Ellison, 2007, p. 186). Clamence realized that the true spectral nature of judgment did not reside in law courts but in existence itself. As he said, "the keenest of human torments is to be judged without law. Yet we *are* in that torment" (Camus, 1991, p. 36; *Italics mine*). The very immanence of the life that one lives is the very locus where judgment takes place. The conscious reality here is that judgment is neither a thing of the past, a specter of yesterday nor of the future, when it signals some enigma befalling one's fate. If Camus noted that in Nietzsche nihilism became conscious (Camus, 1951/1992, p. 65), in *La Chute*, the existentialism of judgment that forever traps the subject into hypocrisy becomes fully alive in the present and is becoming conscious. It is to this definitive frame that Clamence exhorted: "don't wait for the Last Judgment. It takes place every day" (Camus, 1991, p. 34).

The futile exercise of evading judgment is an option not unconsidered by Clamence. In fact, it was his reactionary move before. He wants, as it were, to sidestep from the laughter that mocks his existence. He says, "in order to forestall the laughter, I dreamed of hurling myself into the general derision [...] a question of dodging judgment. I

wanted to put the laughs on my side, or at least to put myself on their side" (Camus, 1991, p. 29). Realizing the vanity lying at the kernel of judgment, Clamence finally woke up with the thought that even a God-incarnate – Christ – must have grasped his very own divine hypocrisy. Clamence exposed how Christ knew that under his name, Herod's license to slay innocent children operated and thereby reserved the guilt to his innocence. The remaining option for such interplay was for the incarnate to hasten judgment for himself, that is, to take the crucifixion. Clamence took this role of judging and assigned it to man in existence: "wherefore, since we are all judges, we are all guilty before one another, all Christs in our mean manner, one by one crucified, always without knowing" (Camus, 1991, p. 36).

Confronted perpetually by this specter that laughs within, the enduring judgment that falls to anyone, Clamence reexamined the possible temperament of allowance. One can allow oneself to laugh with one's inner laughter – this calling and mockery of judgment. He ventured on to another antic, which was that "it was better to cover everything, judgment, and esteem, with the cloak of ridicule" (Camus, 1991, p. 29). The next move then was not to succumb to Plato's warning. Ironically, this reverses also the idea that essence precedes existence – that the ideals of a pipedream Republic be set as preconditions to the lives of future rulers. However, it is precisely the opposite that is becoming more vital for Clamence to precede essence with existence. The

contrary is that to exist is to accept the opposite subjunctive – ‘let them *be* a fan of laughter.’

Tragically, this can be viewed in an anxiety of sorts. Clamence's way of letting himself be a fan of laughter, to live with the specter that laughs with him in sitting on the courts of judgment, is to take judgment in a form of narration. A “ridiculous fear,” he says, “pursued me, in fact: one could not die without having confessed all one's lies” (Camus, 1991, p. 28). He is not comfortable in dying with his own hypocrisy so he now intends to share it as a felt need in opening himself through others' gazes. And this addressing of the need is not easy: “oh, I don't feel any self-satisfaction, believe me, in telling you this” (Camus, 1991, p. 22).

The kind of narration that Clamence does is not that of an old man reveling his experience as a sage advice. Instead, he speaks as a narrator who even though is not accustomed to share everything, accepts the need that it must be the only way of getting that one shot of becoming protagonist again in his own story. Usually, “the narrator has knowledge denied to the protagonist of how the story goes on” (Lloyd, 1993, p. 15) but Clamence in the novel is not only the main character that one can conceive as the protagonist. Clamence is also the narrator who knew exactly everything from the start, and who reserves some information until he dramatically unfolds the details reserved only for heroes that will triumph in the end. Incidentally, this gives him the warrant to give access to the laughing specter and to allow him to laugh with it. Here, narration is

“an important means by which these [images and memories] are rescued from oblivion and from the unconscious” (Harrison, 2004, p. 130). In such a sense, he is becoming the focal character of his story. Currie says that “the fact that the narrator tells us something that a character does know gives us only very weak grounds for concluding that this character *is* the focal character, if there is one” (Currie, 2010, p. 128). But Clamence *does* know his character and narrates it quite eloquently as if he is convinced of his being talkative.

For Ellison (2007, p. 182), the “narrative structure of *La Chute* is circular. Clamence has related a story that can now be repeated by his listener, who, in telling his story, can invite another person to confess, ad infinitum.” In other words, when he accepts the specter to laugh with it, he places his own judgment in a consoling position by possibly eliciting confession to another man who is also caught in this complex arena of spectral judgments. Camus,

recognizes that cruelty is never very far from laughter, since both laughter and cruelty derive from the superiority of one person over another. As Clamence progresses towards his final status as judge-penitent, he understands that he can regain his mastery over others by laughing at himself. (Ellison, 2007, p. 186).

The double nature of man's duplicity makes it possible for the laughter to emit a sense of cruelty so that the laughter

of judgment is passed to another other than oneself. That is to say, penitence “as practised by Clamence is merely a step towards the attainment of judgmental superiority” (Ellison, 2007, p.186). In the text, Clamence already experiences this superiority during his profession: “My profession satisfied most happily that vocation for summits... It set me above the judge whom I judged in turn... Just weigh this, *cher monsieur*, I lived with impunity” (Camus, 1991, p. 11). However, this kind of superiority slowly descends after it reaches its peak. Clamence understands that his impunity is merely “ephemeral” since the same feeling is also experienced by good criminals who want to kill just to be in the headlines. For Clamence, “to achieve notoriety, it is enough, after all, to kill one’s concierge. Unhappily, this is usually an ephemeral reputation” (Camus, 1991, p. 11). The remaining thing to do is to confront the existential hypocrisy that subsists in the vocation of man.

The Vocation of a Hypocrite

Davidson (2004) noted of the important discussions of hypocrisy in Arendt (1978, 1963/1990), Cavell (1984), Currie (2010), Grant (1997), Harrison (2004), Lloyd (1993), and Shklar (1984). Arendt is worth mentioning here when she took notice of Camus in a letter to her husband: “Yesterday, I saw Camus: he is, undoubtedly, the best man now in France” (as cited in Isaac, 1992, p. 17). The relevance of Camus is also the relevance of Clamence, but as was maintained above, the duality of faces

portrayed by the Camus/Clamence identity is glaring at the direction of duplicity. The fact that it can be applied to anyone makes it a general concern, a human concern. Clamence acknowledged this even in the government of his time in Paris: “Paris was already at dinner ... I was happy. The day had been good: ... a brilliant improvisation in the company of several friends on the hardheartedness of our governing class and the hypocrisy of our leaders” (Camus, 1991, p. 14).

Therein lies the extent to which the scope of hypocrisy reaches: hypocrisy intersects the aspects not just of one individual’s life but also the whole of economic, aesthetic, and socio-political life. The economic aspect is argued in the guise of a proclivity. For Weaver (2008, p. 3), hypocrisy “may be a natural, enduring, and even necessary feature of Bank life,” giving the license to withhold certain information about the operation of the money institution. For Walter Benjamin, religion and its structures are replaced with money and its institutions in capitalism, so that money is the new god and the banks are its new temples. If this is so, then the assertion that religion is ‘hypocritical’ – that it reserves certain absolute truths to itself and its magisterial interpretation of them while at the same time justifying its faulting and erring application to them in real life – is also a viable analogy to pass its feature to banks as hypocritical.

In theatrical performances, one is necessitated to wear a mask to proceed with the acting. This historically puts forward the idea that acting as “hypocrisy was a constant

in moral pamphleteering in the seventeenth and eighteenth centuries in England and France” (Wikander, 2002, p. xi). It goes into the dimension of telegenic or theatrical life and it also incorporates the dimension of socio-political life. Says Clamence,

It's not at all surprising that minds are confused and that one of my friends, an atheist when he was a model husband, got converted when he became an adulterer! Ah, the little sneaks, play actors, hypocrites—and yet so touching! Believe me, they all are, even when they set fire to heaven. Whether they are atheists or churchgoers, Muscovites or Bostonians, all Christians from father to son. (Camus, 1991, p. 41).

That is to say, acting is not only carried out in theatres but also in the roles one plays in society. The understanding is that “there is no way of breaking out from the hypocrisy of political life, and all attempts to find such an escape route are a delusion” (Runciman, 2008 p. 196). In political life, it is not just the masks of comedy or tragedy that one is inclined to wear, but real masks – varied and relative – as if changing and dancing with identities. In this sense, it is keen for Oscar Wilde to write in his letter *De Profundis* that “most people are other people. Their thoughts are someone else's opinions, their lives a mimicry, their passions a quotation” (Carabine, 1999, p. 73). The atmosphere of social existence here enables one to put even one's persona in writing in an eccentric

kind of pedestal. Clamence notes that “since, nevertheless, they [writers] cannot keep themselves from judging, they make up for it by moralizing” (Camus, 1991, p. 41). Following this never-ending making up of one's life are the “insights into the intricate dance of hypocrisy and anti-hypocrisy, the constant round of masking and unmasking that makes up our social existence” (Runciman, 2008, p. 4). In the text, this is best illustrated in how Clamence saw his own reflection: “My reflection was smiling in the mirror, but it seemed to me that my smile was double ...” (Camus, 1991, p. 15).

The web interlocking the spaces that speak of hypocrisy is then layered, mask after mask, that in reality, it is already embedded in the fabric of existence. Placed in the seat of judgment, it becomes more complicated. “That the hypocrite wishes to avoid detection and punishment,” Naso (2010) opined, “is only the beginning of a complex story” (p. 36). Even in confronting judgment, Clamence sought particular advice on his narration of himself when he laid down the nuances of his hypocrisy:

You see, a person I knew used to divide human beings into three categories: those who prefer having nothing to hide rather than being obliged to lie, those who prefer lying to having nothing to hide, and finally those who like both lying and the hidden. I'll let you choose the pigeonhole that suits me. (Camus, 1991, p. 37).

The reason for this intricacy is traced in the face of hypocrisy. Its nature seems to be tied to that of truth, freedom, and authenticity – but always in the bifurcating surface of a paradoxical appearance bearing at the same time the look of truth and falsehood. Clamence said that “truth, like light, blinds. Falsehood, on the contrary, is a beautiful twilight that enhances every object” (Camus, 1991, p. 37). Putting it in the light of the postmodern setting where perspectives are relatively reviewed, one can note ostensibly that there is a simultaneous revealing of one’s face of sincerity and deception in hypocrisy. Hypocrisy, in this sense, becomes the only viable narration to transgress the remorsefulness born out of one’s original and unforgivable sin.

One is likely to regard transgressions less harshly when the agent acts on the basis of mistaken beliefs; he may sincerely believe that he acts virtuously, utterly self-deceived about his deeper motivations. This is the paradox Camus’ portrayal of Clamence throws into relief. It can be formulated affirmatively by the assertion that deception (or self-deception) is a frequent, if regrettable, means for achieving worthy goals. Hypocrisy coexists with the virtues of authenticity and truthfulness. In the end, neither the consequences of actions nor their felt sincerity are determinative. This is the key insight of the postmodern perspective. (Naso, 2010, x-xi).

The impulse that the subject must go on caters for him the need to narrate his story by reflecting his hypocritical life to others. Clamence exposed this early in the novel. In the text, he says, “after all, I know of others who have appearances on their side and are no more faithful or sincere” (Camus, 1991, p. 14). Thus, by confronting the hypocrisy of man, one is once again caught in the general ordinariness of its ordeal. Shklar’s *Ordinary Vices* (1984), for instance, analyzes hierarchically the vices of man according to the hazard they pose to liberal societies. She found out that cruelty was the worst vice and that the vice of hypocrisy as a practice should not be a big deal since it thrived in the category of “ordinary vices,” so that one must “stop minding about it so much” (Runciman, 2008, p. 196).

But the principle that Clamence stands for is not a general predisposition from passive hypocrisy. He rather engaged hypocrisy not as an ordinary letting be but as an active characterization that concerns all. He says:

Is not the great thing that stands in the way of our escaping it the fact that we are the first to condemn ourselves? Therefore it is essential to begin by extending the condemnation to all, without distinction, in order to thin it out at the start. No excuses ever, for anyone; that’s my principle at the outset. (Camus, 1991, p. 40).

In other words, the leveling of hypocrisy to the baseline proclivity or ordinariness

of human affairs is strictly not a kind of surrender to the structure. In which case, his existentialism would not be different from the herd mentality that Nietzsche critiques. What this further reflects is the formula of *ressentiment* in Nietzsche's (1887/1966) *Genealogy of Morals*: they are the birds of prey, therefore we are the good lambs. In *The Fall*, the version can be explicated as this: 'My life is imperfect, which gives me the warrant to pass this judgment to others.' In Clamence's words, he used the term *accusation*: "the more I accuse myself, the more I have a right to judge you" (Camus, 1991, p. 42).

Clamence's life accepts hypocrisy not as deplorable duplicity but as a face that is forever haunted by the specter of judgment. Thus his narration of himself in relation to penitence: "in as much as every judge someday ends up as a penitent, one had to travel the road in the opposite direction and practice the profession of penitent to be able to end up" (Camus, 1991, p. 41). In finding a way to embrace his own hypocrisy by practicing penitence, hence the double profession of 'judge-penitent,' he devised a way to free himself from solely claiming responsibility into a collective disposition that entails and concerns the lives or vocations of any man. By claiming the judgment, he also claimed a newly found freedom that even ran counter to his previous claims. He said, "I was wrong, after all, to tell you that the essential was to avoid judgment. The essential is being able to permit oneself everything, even if, from time to time, one has to profess vociferously

one's own infamy" (Camus, 1991, p. 42). In Clamence's role of judge-penitent, Johnson's words 'no man is a hypocrite in his pleasures,' become conscious for the first time, when it makes room for a vocation that is rooted in an existentialism of freedom.

The vocation of a hypocrite then, the life of a judge-penitent, is a life that exudes a kind of freedom that sets itself apart from the monotonous events of existence. Clamence says that "real vocations are carried beyond the place of work" (Camus, 1991, p. 40). Life truly happens at the realization of its place at a distance, when one can deal with oneself the question that concerns one's life. He narrated: "I confess I am drawn by such creatures who are all of a piece. Anyone who has considerably meditated on man, by profession or vocation, is led to feel nostalgia for the primates" who "don't have any ulterior motives" (Camus, 1991, p. 5). However, the freedom that Clamence practices in hypocrisy is a paradoxical one. Its fundamental feature is the face of penitence when Clamence said that "in short, you see, the essential is to cease being free and to obey, in repentance, a greater rogue than oneself. When we are all guilty, that will be democracy" (Camus, 1991, p. 41). At the same time, it is also a length that measures to some extent the haven with which one rests one's heart in place, a vocation where one can practice one's unique self. In short, freedom is an existential practice of confronting one's very self in that it makes one evaluate one's life. For Clamence,

freedom is not a reward or a decoration that is celebrated with champagne. Nor yet a gift, a box of dainties designed to make you lick your chops. Oh, no! It's a chore, on the contrary, and a long-distance race, quite solitary and very exhausting. No champagne, no friends raising their glasses as they look at you affectionately. (Camus, 1991, p. 40).

The final point that Camus appealed in the words of Clamence is the further emphasis on the locus of one's freedom. In *La Chute*, there are no other lives that are concerned in the practice of one's freedom except one's vocation. This is clarified in the minor premise of Clamence's words that "when you don't like your own life, when you know that you must change lives, you don't have any choice, do you? What can one do to become another? Impossible" (Camus, 1991, p. 43). What therefore entails in the vocation of a hypocrite, of a judge-penitent, is an existence that mirrors vocation *per se*. Camus' existentialism discloses its substratum in a final appeal for hope, a final shot at salvation, to save himself and the specter that laughs at his judgment. In the final lines of the novel, Clamence appeals of a chance to save once again the lady at the bridge, a reversal of choice had he had the moment to relive it. But this is not the path by which freedom led him. What it leads to is the abyss that bypasses the moment in his famous last words: "It's too late now. It will always be too late. Fortunately" (Camus,

1991, p. 44). If there isn't this paradoxical temptation of vocation, then at best, freedom merely borders on a Kafkaesque postscript: "Oh, plenty of hope, an infinite amount of hope, but not for us!" (Jennings et al., 2005, p. 789).

CONCLUSION

In this paper, one can surmise that the novel *The Fall* is an illustration of a hypocrite's vocation. Jean-Baptiste Clamence, the main character and narrator of the story, exposes himself via the specter of hypocrisy that lingers in his experiences. The literal fall of a woman from his memory haunts and taints the dignity that he accustomed himself in his Parisian days as a practicing lawyer. The nobility that Clamence built for himself in what may be coined as his *Eden* or paradise moments is shattered by the laughter that mocks him. The laughter of judgment then lays the necessary impulse to shift Clamence's perspectives in life and ultimately the perspective of his life. He does this through narration, acknowledging firsthand the hypocritical disposition that his life entails. That is to say, the ivory tower of one who judges that is his life found a viable route in going out in the open as a move for self-judgment: a life that he self-proclaimed as a 'judge-penitent.'

The vocation of a judge-penitent allows Clamence to be free, that is, to have a paradoxical freedom that operates first as a penitent and then as an existence that places one's life at the heart of things, or more accurately, an existence that evaluates

and puts one's heart in place. Clamence is therefore not operating on the general course of things, a defeatist panacea to the seemingly hypocritical trap of false freedom; but he is actualizing himself in the freedom that he has newly found as a hypocrite, a judge-penitent – a vocation that carries with it the profound enigma of choosing, falling, narrating, and ultimately, existing.

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Defying Norms and Redefining Identity: Yeong-hye's Journey in Han Kang's *The Vegetarian*

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ABSTRACT

Rooted in the ostensible noninterventionist South Korean society, Han Kang's novel *The Vegetarian* brings forth the atypical narrative of the protagonist Yeong-hye's resistance and redefinition of identity through embracing vegetarianism. As food functions as an instrumental tool in the outlandish account of Yeong-hye, this paper tries to inspect its impact on shaping her perceptions towards desire, pleasure, sexuality and identity. Through the lens of Vegetarian Ecofeminism, this study attempts to analyze various aspects of violence like ecological, sexual and physical. Hence, by identifying the metaphor of vegetarianism used as a means for self-reclamation and journeying through the protagonist's uncanny transformation, the paper arrives at a profound comprehension of the protagonist's complex psyche and an intense exploration of her existential dilemma.

Keywords: Ecological, identity, resistance, vegetarianism, violence

INTRODUCTION

*Well, I try my best
To be just like I am
But everybody wants you
To be just like them
- BOB DYLAN, "Maggie's Farm"*

Rooted in the ostensible noninterventionist South Korean society, Han Kang's novel *The Vegetarian* (2015) brings forth the atypical narrative of the protagonist Yeong-hye's resistance and redefinition of identity through embracing vegetarianism. Journeying through the protagonist's uncanny transformation, the text explores her existential dilemma faced and provides a profound comprehension of the character's psyche. With a striking storytelling narrative, author Han Kang demonstrates how the 'unconventional' food practice of Yeong-hye brings out the

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culture of the society that is predominantly patriarchal in nature. The text discusses various aspects of violence like physical, sexual and ecological by identifying the metaphor of vegetarianism that is being used as a means of resistance against aggression and for reclamation of self-identity. As food functions as an instrumental tool in the peculiar saga of Yeong-hye, it shapes her perceptions towards desire, pleasure, sexuality and identity. The objective of this paper is to explore the imaginative and creative way in which vegetarianism is used to bring out a sympathetic approach towards animals as well as a difference in the attitude of the two sisters in the novel.

The Vegetarian, first published in South Korea in 2007 and translated into English in 2015 by Debora Smith, is an extension of a short story written by Han Kang, "The Fruit of My Woman" which has the theme of a woman turning into a plant and her husband waters her daily. Interestingly, in *The Vegetarian*, the protagonist Yeong-hye becomes a vegetarian after a nightmare and combats violence by trying to become a tree. Yeong-hye's peculiar behaviour infuriates her husband Mr. Cheong and ultimately, the rest of her family members admit the protagonist into a psychiatric hospital.

METHODS

The Vegetarian through the Lens of Ecofeminism and Vegetarian Ecofeminism

The Vegetarian raises human rights issues through the seemingly feminist issues, vocalising the trauma of violence and

veganism that disturbs the dominant, psychologically and sexually, men around her. The origin of veganism and meat-eating matters since it is not merely someone's personal choice but coloured by several interpersonal and trans-cultural factors that talks about a person's or a group of people's ethnic as well as personal behaviour that is also postcolonial in nature. This fact spreads its roots deeper into the concept, 'personal is political.' Hence, in *The Vegetarian*, the 'sexual politics of meat' can clearly be traced out. The book has elements of posthumanism due to the non-conformist nature of Yeong-hye, as Stobie (2017) pointed out in her essay, "The Good Wife? Sibling Species in Han Kang's *The Vegetarian*". Thus, this project comes under the theoretical framework of vegetarian ecofeminism which is a branch of ecofeminism.

Ecofeminism is a theory that was developed in the 1970s with the publication of Rachel Carson's *The Silent Spring*. The term 'eco' comes from ecology, the study of living organisms and their environment. 'Feminism' is associated to acquiring gender equality and equal rights for women in any society. The term 'ecofeminism' first appeared in the year 1974 in Françoise d'Eaubonne's *Le féminisme ou la mort*. This concept emphasizes that due to their capacity to 'reproduce' and 'mother,' women and nature are often linked to each other. Ecofeminists also believe that there is an irrefutable link between the oppression of women and nature. Hence, here gender is used as a tool to examine the conditions for

the subordination of both women and nature. Consequently, ecofeminism is used both as a feminist as well as an environmental theory. Ecofeminists believe that society is capitalistic patriarchal in nature and therefore, ecofeminism also deals with the aspect of how women are treated in an essentially patriarchal society. Rosemary Radford Ruether, Vandana Shiva, Paula Gunn Allen, Andy Smith, LuisahTeish, IvoneGebara, Alice Walker, Karen Warren, Monica Sjoo and Susan Griffin are some of the very well-known ecofeminists.

In the same way, vegetarian ecofeminism is an academic movement which states that all kinds of oppression like sexism, racism, casteism are related to one another and hence they must be eradicated. The theory of vegetarian ecofeminism emphasizes on the fact that not only the humans, but also the non- human animals undergo domination; just like how men exploit women and the human race as a whole exploits nature and non-human animals. Vegetarian ecofeminism extends beyond ecofeminism since it believes that the killing of nonhuman animals and their exploitation by humans should be taken note of distinctly. According to Gaard (2002), vegetarian ecofeminism is feminism's third generation. Greta Gaard and Carol J. Adams are the key thinkers of Vegetarian ecofeminism. Greta Gaard's essay "*Vegetarian Ecofeminism: A Review Essay*" (2002) includes many of the key concepts within the field along with the importance of speciesism in ecofeminism. Correspondingly, Carol J. Adams who is a key vegetarian ecofeminist writer and activist

focuses on the importance of connecting speciesism to sexism and she has spent over twenty years writing about ecofeminism. Her article titled "*Ecofeminism and the Eating of Animals*"(1991) is an essential work to the field which focuses upon the importance of not consuming meat as an ecofeminist. "*The Sexual Politics of Meat*" (Adam, 1990) is her earlier major works that examines various major themes that come under vegetarian ecofeminism.

On the similar line, SheriLucas's "*A Defense of the Feminist-Vegetarian Connection*" (2005) which is a response to Kathryn Paxton George's (2000) book, "*Animal, Vegetable, or Woman? A Feminist Critique of Ethical Vegetarianism*" is the one to establish a connection between feminism and vegetarianism for the first time. According to the feminist-vegetarian connection that she talks about, Lucas (2005) mentioned that the oppression of animals by slaughtering them was just like how women were oppressed in a patriarchal society. Hence, a connection between women and animals can also be traced out here and Carol J. Adams had first published on this topic in 1975. Similarly, Rosemary Radford Ruether (1975) in one of the ecofeminist books, "*New Woman, New Earth: Sexist Ideologies and Human Liberation*" stated:

Women must see that there can be no liberation for them and no solution to the ecological crisis within a society whose fundamental model of relationships continues to be one of domination. They

must unite the demands of the women's movement with those of the ecological movement to envision a radical reshaping of the basic socioeconomic relations and the underlying values of this society (Ruether, 1975, p. 204).

Her statement made it clear that both women and nature were subjects of the tyranny of male domination. This violation can be clearly traced through the violence depicted in the novel under discussion, *The Vegetarian*.

Speciesism, another form of oppression, is central to the concept of ecofeminism. It plays a fundamental role in distinguishing vegetarian ecofeminism from ecofeminism. This concept is significant because of the focus of vegetarian ecofeminism on the oppression of nonhuman animals as speciesism connects all the other forms of oppression, especially the oppression of women as mentioned by Jason Wyckoff (2014) in his article "*Linking Sexism and Speciesism*". The belief that 'speciesism is a valid form of oppression that must be eradicated' is at the centre of most of the vegetarian ecofeminist arguments. Vegetarian ecofeminism also opposes humanism as the latter argues that the humans who are oppressed based on color or caste are morally humans while nonhuman animals are not (Kheel, 2004). The vegetarian ecofeminists affirm that there is a bond between human beings and non-human animals. The act of empathizing with animals is not unusual as humans, across cultures, lovingly keep animals as

pet which is a testimony of the strong and emotional bond between animals and human beings.

Vegetarian ecofeminism argues that the killing of any animal is part of a larger system of oppression and that instead of choosing one animal over another, or a human over a nonhuman animal, humans should care about all oppressed subjects, investing themselves in ending each subject's oppression so as to end the oppression of all beings. Hence, Brian Luke (1992) asserted that the:

"Act of expiation in which humans justify the act of killing nonhuman animals shows that humans are inclined not to harm animals, otherwise there would not need to be any mechanisms created cross-culturally to help deal with the guilt felt in killing animals" (Luke, 1992, p. 82).

Moreover, the creation of hierarchies in nonhuman animals can become the creation of hierarchies in humans, and thus one can once again observe how speciesism is linked to racism, classism, sexism, and other forms of oppression. Therefore, Best asserted that as long as "humans are violent toward animals, they often are violent toward one another" (Best, 2006, p. 22) and this "vicious circle of violence and destruction can end only if and when the human species learns to form harmonious relations – non-hierarchical and non-exploitative – with other animal species and the natural world" (Best, 2006, p. 22). Some people

become vegetarian in order to illustrate their empathy and affection for animals and this gesture can also sometimes be considered as their way of raising their voice against the violence meted out to animals. Hence Luke affirms:

I am appalled by the abuses themselves—shooting, trapping, and poisoning; branding, castrating, forcibly impregnating, separating mother and young, tail docking, debeaking, confining, transporting in cattle cars, and slaughtering; burning, cutting, gassing, starving, asphyxiating, decapitating, decompressing, irradiating, electrocuting, freezing, crushing, paralyzing, amputating, excising organs, removing parts of the brain, socially isolating, inducing addiction, and imposing disease—these acts are repellant because of what they do to the animals. My moral condemnation of the acts arises directly from my sympathy for the animals (Luke, 1992, p. 81-82).

RESULTS AND DISCUSSION

Resistance against Patricentric Violence

The patriarchal nature of society, especially of the Korean society in general, can be viewed in *The Vegetarian*. Vegetarian ecofeminism argues that the oppression of nonhuman animals is closely linked to the oppression of women. Thus, meat-eating is the exploitation of animals and

hence this makes one complicit to violence against women due to their violence against animals. Thus, meat-eating becomes “a form of patriarchal domination... that suggests a link between male violence and a meat-based diet” (Gaard, 2002, p. 123). This makes vegetarianism, as a protection against all kinds of violence. While the rest of her family forces Yeong-hye to eat meat with their persuasive words, the father of the protagonist slaps her and force-feeds meat into her mouth. However, Yeong-hye strongly resists this by spitting out the meat and giving an animal cry. She resists the universal and conventional norms of society through a new standpoint even though she is physically tormented by her family, and especially by her father as she decides to stop eating meat. The author Han Kang too echoes analogous contemplation in her interview BethannePatrick where she explains:

I think this novel has some layers: questioning human violence and the (im)possibility of innocence; defining sanity; and madness: the (im)possibility of understanding others, body as the last refuge or the last determination, and some more. It will be inevitable that different aspects are more focused on by different readers and cultural backgrounds. If I could say one thing, this novel isn't a singular indictment of the Korean patriarchy. I wanted to deal with my long-lasting questions about the possibility/impossibility of

innocence in this world, which is mingled with such violence and beauty. These were universal questions that occupied me as I wrote it (Patrick, 2016, para. 9).

In the Korean culture, it is believed that if a dog has bitten someone, it has to be cooked and consumed so that the poison in the body of those bitten would be purified. In the text, Yeong-hye remembers such an occasion when she had to consume the dog that had bit her. Her father had dragged the dog tied to his bike until it bled. Later, the dead dog was cooked and was consumed by the whole family. Hence, violence is not only meted out to women but also to animals as seen in the novel. Later in the text, it can be comprehended that turning vegan and eventually refusing to eat food at all is Yeong-hye's penance for her father's gruesome killing of the dog. As she turns against animal sacrifice, now, the only body or animal she is ready to sacrifice is herself and she is ready to forgo her life by slitting her wrist.

Yeong-hye smells the odour of meat from her husband's body pores and confesses that she is not able to stand this strong smell. Hence, she does not indulge in any sort of physical relationship with her husband and this ultimately results in violence, aggression, and marital rape. Further, her refusal to cook in her kitchen, to wear a bra or to wear makeup are other instances that significantly demonstrate Yeong-hye's breaking away from old conventions and striding towards a new path. The acts of cooking for the family,

dressing up attractively or doing makeup in a particular manner are usually associated with atypical feminine traits and these traits are manipulated to keep women within the patriarchal boundaries. Yeong-hye's voice of protest against these accepted norms can be seen as a sign of resistance towards the male-dominated social conventions.

Dreams and Violence

In the discussed text, dreams become a significant tool through which secreted emotions of the characters are conveyed. Through her dreams, Yeong-hye recollects her horrific experiences of consuming meat and she admits:

The lives of all animals that I've eaten have all lodged there. Blood and flesh of all those butchered bodies are all scattered in every nook and cranny and though the physical remnants were excreted their lives still stick stubbornly to my intestines (Kang, 2015, p. 56).

Yeong-hye's dream which is filled with gloom, darkness and the dripping blood from raw meat, provokes her to turn into a vegetarian. In other words, here her dreams are treated as monologues of the characters. The dreams of Yeong-hye are violent in nature. She relives her traumatic childhood memories through these dreams, whereas small children, Yeong-hye and her sister "were frequently left throbbing by their heavy-handed father" (Kang, 2015, p. 129). While In-hye had cleverly learnt to evade her father's beatings, Yeong-hye "merely

absorbed all her suffering inside her, deep into the marrow of her bones” (Kang, 2015, p. 129).

Disturbing narratives such as the sufferings undergone by young little Yeong-hye and In-hye demonstrate the extent of brutality and violence they experienced by the hands of their father. There is only a silent rebellion on the part of Yeong-hye and the sister In-hye against their father’s cruel attitude. For In-hye, taking up the household chores is a means of escape from their father’s wrath. While initially this behaviour has been comprehended as “a sign of maturity” (Kang, 2015, p. 158), it had been a survival strategy. The deeper anxieties and fears of Yeong-hye and her sister can only be understood through their dreams and not through their conversations. They do not convey their deepest feelings to each other through their conversations and this is how dream sequences evolve into narratives in *The Vegetarian*. Therefore, a peek into Yeong-hye’s dreams ascertains that she has surrendered herself to her unconscious mind- a frightening world filled with the memories of her past. Moreover, in an interview with Sarah Shin, author Han Kang explains that:

Yeong-hye only has a voice in very brief dream-monologues, so the image of this singularly tough and determined woman is gathered into an imperfect composite, through the gazes and voices of those around her. I am concerned with stories and certain moments of truth which cannot be told using traditional

modes of narration (Shin, 2016, para. 16).

It can be further comprehended when Kang wrote,

With her words sounding in his ears like a lullaby, one he could make neither head nor tail of, she plunged over the edge of consciousness and into a seemingly bottomless sleep. But I’m not scared anymore. There is nothing to be afraid of (Kang, 2015, p. 113).

It is evident from the text that along with Yeong-hye, her husband and also her sister experience violent nightmares. Yeong-hye’s husband, Mr. Cheong dreams of peeling the flesh off a person’s body until only the skeletons remain. Similarly, In-hye also loses sleep over her bizarre and disturbing dreams. She dreams of black rain and blood trickling down her forehead. Further, In-hye admits: “I have dreams too, you know. Dreams... and I could let myself dissolve into them, let them take me over...but surely the dream isn’t it all there is? We have to wake up at some point, don’t we?” (Kang, 2015, p. 182) Thus, there emerges a clear conflict between reality and dreams.

The dreams of the characters of the novel are about their life’s reflections which have altered and ruptured their superficial faces and veiled identities. The dreams can be viewed as their primal self. However, only Yeong-hye avoids contact with the material world, unlike the other two characters as a result of the nightmares she has. In-hye and Mr. Cheong are not capable of giving into

their dreams as Yeong-hye does. This can also be the reason why In-hye is not able to succumb to the uncanny transformation of her younger sister. Kang writes:

She was no longer able to cope up with all that her sister reminded her of. She had been unable to forgive her for soaring alone on the boundary she could never bring herself to crossover; unable to forgive the magnificent irresponsibility that had enslaved Yeong-hye to shuck off social constraints and leave her behind as still a prisoner (Kang, 2015, p. 135).

Only then, In-hye starts to comprehend the intricate and multifaceted emotions of Yeong-hye. However, this compassionate understanding of Yeong-hye's transformation is tricky. Yeong-hye's act of withdrawal and locking herself up in her psychological world is beyond the comprehension of her family. It becomes furthermore shocking that in her transformation, Yeong-hye becomes more resistant towards those who attempt to amend her newly adapted habits and behaviour. Kang describes it as: not suddenly, but over a period of time – she became difficult to be read; so difficult that there were times when she screamed like a total stranger (Kang, 2015, p. 129). Kang further writes:

Yeong-hye was retreating from herself, becoming distant to herself as she was to her sister. A forlorn face behind a mask of composure.

This was nothing like a melancholy that sometimes afflicted her husband, and yet in certain respects, they were both baffling to her in exactly the same way. They were both descending further into silence (Kang, 2015, p. 130).

Thus, Yeong-hye can no more be understood by anyone around her until, in the end, her sister comes to understand what she is going through.

Food, Desire and Passion

The theme of food, desire and passion is a notable aspect of *The Vegetarian*. The taboo of desire is not vulgarized but it is nevertheless disturbing because it shapes the identity and perceptions of the characters in *The Vegetarian*. Hence, in the novel, both food and passion have been shown as two factors that are closely integrated. Hence, food and sex are intimately connected; they are “physically linked in the limbic system of the brain, which controls emotional activity generally” (Fox, 2014, p. 11). To prove this, in one of the incidents that happen in the novel, the brother-in-law brings food for Yeong-hye when he goes to meet her for the first time in her new apartment. As the food is an important part of the Korean culture, the food metaphor is used as a “bridge to mark the importance of the event and as an icebreaker and demonstration of the family's goodwill” (Fox, 2014, p. 12). Here in the text, Yeong-hye's brother is seen to be using food as an excuse to present his wish to his sister.

Fox again affirms,

We have to eat; we like to eat; eating makes us feel good; it is more important than sex. To ensure genetic survival the sex urge need only be satisfied a few times in a lifetime; the hunger urge must be satisfied every day (Fox, 2014, p. 1).

Interestingly, even though Yeong-hye refuses to consume meat or any kind of food as such, having a sexual encounter with her brother in law helps her gain her identity — a unique identity which emerges as a result of her vegetarianism and the eventual abstinence from food. After passionate lovemaking with Yeong-hye, her brother-in-law looks into her eyes. As Kang describes it:

... her eyes were agitated as she attempted to convey the cause of her affliction. ‘I thought it was all because of eating meat,’ she said. ‘I thought all I had to do was to stop eating meat and then the faces wouldn’t come back. But didn’t work’... ‘And so... now I know. The face is inside my stomach (Kang, 2015, p. 115).

Thus, desire and passion have not been treated as a means of physical fulfilment. It is not reduced to the status of mere sexual desire as it bestows a sense of ease and contentment on the characters, especially on the protagonist.

The Vegetarian and Ecosexuality

The physical intimacy between the protagonist and her brother-in-law can be connected with sexecology, a term that is popularized by Elizabeth Stephens and Annie Sprinkle since 2002. Stephens underlines that it “may produce new forms of knowledge that hold potential to alter the future by privileging our desire for the earth to function with as many diverse, intact and flourishing ecological systems as possible” (Stephens, 2013, para. 51). Here, sexecology can be perceived as a combination of art, environmental activism, theory and practice. Through sexecology, the ecosexuals seek to make the environment more sexy, pleasurable and varied. This is where the “sexology and ecology intersect. And that’s a term of identity but also a political and artistic stance” (McSpadden, 2013, para. 32). Ecosexuals are found to be engaged in sexual intimacy either in or with nature. They might have an orgasm in the waterfall or even have sex with their partner in natural surroundings. Interestingly, the protagonist Yeong-hye too develops a similar kind of behaviour. Even though she does not explore this idea intentionally, inadvertently she becomes a part of sexecology. Embracing veganism and nurturing plants takes her further close to nature.

The very instance where the flowers painted on her brother-in-law’s body makes Yeong-hye aphrodisiac bears testimony to this fact. Hence, Yeong-hye is aroused due to the painting of flowers all over his body. Furthermore, when her own body is painted with flowers, Yeong-hye does not only wish

to keep the flower paintings on her body but also wants her brother-in-law to paint them again for her, once the colours of the painting start to fade. Yeong-hye's behaviour resonates with the ecosexual statement that asserts, "these human bodies are part of the nonhuman material world" (Morris, 2015, p. 3). When the brother-in-law asks Yeong-hye whether he can film their act of lovemaking, she does not respond. Also, her face does not show any expression of a surprise because now she no more perceives her body in the same way the conformist society does. She feels as if "there was nothing she wouldn't do as if limits and boundaries no longer held any meaning for her. Or else, as if in quiet mockery" (Kang, 2015, p. 169). She understands that her physicality is of no particular use to her. Hence, it will not have anything to do with her inner identity.

The brother-in-law, when he dreams of making love to Yeong-hye imagines,

her skin was a pale green. Her body lay prone in front of him, like a leaf had just fallen from the branch, only barely begun to wither. The Mongolian mark was gone; instead, her whole body was covered evenly with that pale wash of green (Kang, 2015, p. 96).

Amusingly, it looks like the brother-in-law is making love to a plant itself and not a human being. Kang describes it as follows:

When he pulled out, on the point of climax, he saw that the whole of his penis was stained green. A

blackish paste was smeared over his skin from his lower stomach to his thighs, a fresh sap which could have come from either her or him (Kang, 2015, p. 96).

This proves that body painting is an aphrodisiac for the brother-in-law as well. It makes one realize that art can reveal the deepest desires and the darkest thoughts of a human being. It can unveil all those emotions that are inexplicable for people in its rawest and purest of forms. It also demonstrates how the brother-in-law creates a parallel reality for himself by escaping the suffocation he experiences in his real-life and for this, he uses Yeong-hye as a resort to fulfil his fantasy. As a reaction to his behaviour, his wife In-hye wonders:

Had she ever really understood her husband's true nature bound up as it was with that unseemingly impenetrable silence she'd thought at one time that might be revealed in his work in this video art. Before she met him she hadn't even been aware that such a field of art existed despite her best efforts though it was proved incomprehensible to her nothing was revealed (Kang, 2015, p. 168).

When In-hye is reminded of the video of her husband's and her sister's intertwining bodies, she perceives their physical intimacy not as something sexual but as resistance against their own identity and existence. She feels as if her husband and Yeong-hye

are trying to shake off the feeling of being human beings.

Ironically, at the beginning of her vegan journey, Yeong-hye resists her husband's sexual advances only to be raped by him later. But the sexual act between Yeong-hye and her beautifully painted brother-in-law completes her journey. The protagonist affirms that by stopping the consumption of meat, she can attain a kind of satisfaction which will eventually help her to keep her nightmares at bay. Unfortunately, her nightmares keep coming back to her. But after her sexual encounter with her brother-in-law, Yeong-hye is surprisingly overcome by a feeling of tranquillity and reassurance. Now she feels inclusive and experiences a kind of gratification she has experienced never before. She confesses, "There is nothing to be scared of now" (Kang, 2015, p. 115). Moreover, Yeong-hye is also able to eliminate the restlessness of the brother-in-law and vice versa. Here, sex can be seen as a tool of self-fulfilment and when the desire is fulfilled, the characters are peaceful again. Hence, a balance is achieved.

Redefinition of Body and Identity

As it has been discussed earlier, ecosexuals encourage people to treat nature or earth with love rather than exploiting it. In ecosexuality, the earth is viewed as a lover rather than the usual motherly image that is attributed to it. Hence, when two people are engaged in the act of lovemaking, an ecosexual will not think of it as a sexual act rather it will be looked upon as if they are two beautiful flowers who have incarnated

as human beings; both, creations of nature. This element of ecosexuality is especially true in Yeong-hye's situation, "a flower was actually a human being" (Kang, 2015, p. 125). Moreover, by entwining ecosexuality with vegetarian ecofeminism one can see the body of Yeong-hye becoming a plant as she stops eating normal food and survives only with water and sunlight. The sympathetic approach of vegetarian ecofeminism towards the oppression of animals as well as female beings can be understood in the text where Yeong-hye's body is treated as food and vegetation which the people around her prey upon.

It is interesting to note that Yeong-hye's gradual vegetarian ecofeminist transformation is not only a means of self-reclamation for herself but also for her sister In-hye and for a moment "their existences briefly aligned" (Kang, 2015, p. 127). In the text, In-hye represents the real-life characters who are bowed down by social constraints, norms and conventions put forward by a society. Yeong-hye, on the other hand, defies everything conventional. In the hospital, In-hye says, "the air is good here, it'll give you more of an appetite. You'll be able to eat a bit more and put on some weight" (Kang, 2015, p. 143) to which Yeong-hye replies, "Yes...there are big trees here" (Kang, 2015, p. 143). She further continues, "Sister, all the trees of the world are like brothers and sisters" (Kang, 2015, p. 144). Here, one can notice a reflection of the distance between the protagonist and her sister as they have drifted apart beyond reconciliation. Now Yeong-hye identifies

more with the plants, trees and nature and considers them as her sisters and brothers.

In-hye, on the other hand, “hadn’t been able to find a tree that would take her life from her. Some of the trees had refused to accept her. They just stood there, stubborn, solemn yet alive as animals, bearing up the weight of their own massive bodies” (Kang, 2015, p. 154). Hence, it is difficult for In-hye to forget the world around her, unlike her sister. Yeong-hye says, “I am not an animal anymore, sister. I don’t need to eat, not now. I can live without it. All I need is sunlight” (Kang, 2015, p. 154). It is difficult to comprehend whether Yeong-hye is living in her dream by completely ignoring the real world or if she has gone insane as she is now drifting towards a plant life. Her physical body has also started to succumb to her psychological variation as Kang writes, “She hasn’t had her period for a long time” (Kang, 2015, p. 150) and her biological body has also started to alter. Hence, it is apparent that the journey Yeong-hye undergoes is not mere bouts of insanity but a physical transformation that no one would have contemplated feasible.

CONCLUSION

Thus, through a sequence of Yeong-hye’s dreams, her newly adopted vegetarian lifestyle and her implausible physical and emotional journey, the explanation for her unique transformation was being unearthed. Han Kang compassionately sums up the voyage of Yeong-hye in her interview when she illustrated:

Yeong-hye is such a determined person that she believes herself to no longer belong to the human race. She feels and wants to get literally uprooted from human beings. In this way, she believes she is saving herself, but ironically she is actually approaching death. Of course, in the real world she is mad, but to her it is something thoroughly sane. She is trying to root herself into this extreme and bizarre sanity by uprooting herself from the surface of this world (Patrick, 2016, para. 31).

Yeong-hye’s ecosexual passion and desire pave way for the conception of her new individuality which facilitated her to cease leading a conformist life. Consequently, Yeong-hye was able to shed her human identity; an identity that had never been able to offer any connotation to her former existence. Embracing an ecosexual vegetarian way of life took her to an entirely new realm; a novel state of being which conveyed a unique sense of ease and completion. Thus, her present existence offered her answer to her perpetual existential inquiry and this answer was nothing but here defined identity and interestingly, now, this new fangled identity which had continued to be a dormant seed for long, sprouts from the surface of the earth while blooming into a unique flower.

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Enhancing Self-efficacy to Resist Body Shaming in Jacqueline Wilson's *Lola Rose*

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ABSTRACT

Jacqueline Wilson is a former Children's Laureate whose contemporary realistic children's novels have been translated into over 30 languages for her predominantly pre-adolescent and teen-girl readers. However, many adults feel that her works are unsuitable for children due to the contemporary realistic issues discussed. This has resulted in a gap within the scholarship devoted to serious analyses of her books. The paper discusses her novel, *Lola Rose* (2003), with attention given to Lola Rose, the pre-adolescent girl protagonist. It looks at how Lola Rose suffered from her mother's repeated acts of body shaming, causing her to carry a negative body image and sense of insecurity. Using the concept of self-efficacy expounded by Albert Bandura in his work, *Self-efficacy: The exercise of control* (1997), the research examines how sources of efficacy information such as enactive mastery experience, vicarious experience, verbal persuasion, and improved physiological and affective states, enhance Lola Rose's sense of agency. This empowers her to resist the destructive forms of body shaming experienced. The paper argues that contemporary realistic children's novels such as Wilson's are useful tools to empower children in overcoming the threats of body shaming.

Keywords: Albert Bandura, body shaming, Jacqueline Wilson, Lola Rose, self-efficacy

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INTRODUCTION

Jacqueline Wilson is a prolific author of children's literature whom Tucker and Gamble (2001) described as "a serious writer, with some important things to say about children, parents and the nature of contemporary childhood itself" (p. 84).

According to Howarth (2006), she is “one of the most influential writers of her generation” (p. 45). Awarded the prestigious title of Children’s Laureate from 2005-2007, Wilson is a “household name [and a] literary phenomenon” (Corbett, 2007, p. 33) within the English reading community, particularly in the United Kingdom. Despite that, there is a noticeable gap in the scholarship devoted to serious analyses of her novels (Armitstead, 2004; Corbett, 2007; Duncan, 2009). This is partly due to the contemporary realistic issues discussed within the works which many adults feel are unsuitable for children. These issues include topics such as “dysfunctional families, homelessness, and domestic violence” (“Dame Jacqueline”, 2008, par. 2), “breast cancer, nervous breakdown, broken homes” (Kellaway, 2005, par. 6), “children in care [and] step-families” (Howarth, 2006, par. 12). Moreover, the stories do not always portray happy endings, a factor deterring parents and teachers from introducing the books to children under their care. Duncan (2009) thus stated:

[t]he fact that her work has not yet been a subject for serious academic debate in the world of children’s literature is a matter of regret. A writer who sells two million books a year is a phenomenon that needs to be understood with greater critical insight than she currently is (p. 172).

Drawing from that, the study selects Wilson’s *Lola Rose* (2003) and analyzes

the element of body shaming present within the novel which reflects the challenges and struggles that modern children are increasingly threatened with.

For Prater et al. (2006), children’s literature could serve as a useful tool to help young readers identify with and address some of the contemporary realistic issues experienced in their lives. Likewise, Joshua and DiMenna (as cited in Prater et al., 2006) believed that fictional works could be used “to provide information or insight about problems, stimulate discussion about problems, create awareness that other people have similar problems, and in some cases provide solutions to problems” (p. 6). Scholars agree that although Wilson’s works use simple literary conventions, they highlight important issues affecting the young (Pinsent, as cited in Armitstead, 2004; Brown, 2005; Said, 2001). As Duncan (2009) observed, “behind their easy-to-follow narrative and plot line there is a social, psychological and narrative complexity that reveals real sorrow, desperate hardship, moments of grief and unspeakable suffering that Wilson does not shrink from confronting” (p. 167). Unlike the protagonist in Rowling’s Harry Potter series, Wilson’s “lead characters do not find redemption and a heroic role in life through escapist fantasy” (Brown, 2003, par. 10). Rather, they rely on a sense of self-agency to transcend the difficulties and challenges faced as a result of parental irresponsibility. This fulfills Wilson’s aim “to show that all children are affected by the capricious adults who take care of them” (Eccleshare, 2002, par. 4) since “[m]any of her books depict

the grim realities of life and there is no masking the constant disappointments that both children and adults have to contend on a daily basis” (“The chance”, 2006, par. 3). Viewing that, the paper charts how Lola Rose learns self-efficacy to manage her encounters with body shaming within the novel. For this, the study uses the concept of self-efficacy expounded by Albert Bandura in his work *Self-efficacy: The exercise of control* (1997). In it, Bandura forwarded four sources of efficacy information which enhanced one’s sense of efficacy beliefs. They were enactive mastery experience, vicarious experience, verbal persuasion, and improved physiological and affective states. By tracing how Lola Rose’s elevated sense of self-efficacy empowers her to resist the body shaming experienced, the research therefore aims to offer viable solutions to the escalating occurrences of such maltreatment affecting our children.

METHODS

The study first traced the instances of body shaming which Lola Rose experienced from her mother and other characters within the novel. It then analysed how the sources of efficacy information such as enactive mastery experience, vicarious experience, verbal persuasion and improved physiological and affective states, helped to enhance Lola Rose’s sense of self-efficacy and empower her to overcome the threats of body shaming encountered. The following paragraphs explicate the sources of efficacy information and how they function to enhance a person’s perceived self-efficacy.

According to Bandura (1994), “[p]erceived self-efficacy is concerned with people’s beliefs in their capabilities to exercise control over their own functioning and over events that affect their lives” (par. 75). For Schultz and Schultz (2008), self-efficacy involved “our sense of self-esteem or self-worth, our feeling of adequacy, efficiency, and competence in dealing with problems” (p. 354). Cardwell and Flanagan (2003) summarized it simply as a person’s “perceived self-effectiveness” (p. 146). Within the concept, Bandura postulated four sources of information which enhanced perceptions of self-efficacy “including mastery, how people learn; the role that social persuasion and support play in encouraging behavior; and the ways people regulate their own behavior” (Foster, 2006, par. 10). Specifically, these sources encompass enactive mastery experience, vicarious experience, verbal persuasion, and improved physiological and affective states.

Bandura (1997) referred to enactive mastery experience as “experience in overcoming obstacles through perseverant effort” (p. 80) which he believed to be “the most influential source of efficacy information because they provide the most authentic evidence of whether one can muster whatever it takes to succeed” (Bandura, 1997, p. 80). It is also regarded as “the principal means of personality change” (Bandura, 1994, par. 24) because enactive mastery experience “produces stronger and more generalized efficacy beliefs than do modes of influence relying solely on vicarious experiences, cognitive

simulations, or verbal instruction” (Bandura, 1997, p. 80). This is because the method involves the strategy of “breaking down complex skills into easily mastered subskills and organizing them hierarchically” (Bandura, 1997, p. 80) which increases the frequency of success in task performances. Therefore, the effectiveness of enactive mastery experiences in building self-efficacy necessarily includes repeated and perseverant effort as well as consistent exercise of skills in overcoming the struggles faced while fulfilling a certain task. Pajares (2002) rightly pointed out that “strong self-efficacy beliefs are generally the product of time and multiple experiences” (par. 25) coupled by the strength of “self-motivational and self-management capabilities” (Bandura, 1997, p. 104), and the ability to “handle pressure and failure well” (Bandura, 1997, p. 104). Bandura (1994) further explained that enactive mastery experiences accumulated from past accomplishments built “coping skills and instill beliefs that one can exercise control over potential threats” (par. 24). Subsequent successes thereby strengthen efficacy beliefs to the extent that “occasional failures are unlikely to have much effect on judgments of one’s capabilities” (Bandura, 1986, p. 399).

The second source of efficacy information involves vicarious experience where individuals learn self-efficacy and improve their personal competency through “observing how other people behave and seeing the consequences of their behaviour” (Schultz & Schultz, 2008, p. 353) particularly from “proficient models

who possess the competencies to which they aspire” (Bandura, 1997, p. 88). Although not as indicative as enactive mastery experience, “modeling influences that enhance perceived self-efficacy can weaken the impact of direct experiences of failure by sustaining performances in the face of repeated failure” (Bandura, 1986, p. 400). Further, research has shown that “[w]hen adequacy must be gauged largely in relation to the performance of others, social comparison operates as a primary factor in the self-appraisal of capabilities” (Festinger, 1954; Goethals & Darley, 1977; Suls & Miller, 1977, as cited in Bandura, 1997, p. 87). By drawing motivation from competent others through social comparison, vicarious experience is thus able to “alter efficacy beliefs through transmission of competencies” (Bandura, 1997, p. 79).

The third source of self-efficacy appraisal comes from verbal persuasion which includes feedback and judgments that others provide pertaining to one’s competency. Bandura (1997) observed that a person’s self-efficacy was also enhanced when “significant others express faith in one’s capabilities than if they convey doubts” (p. 101) during difficult phases. Accordingly, “[p]eople who are persuaded verbally that they possess the capabilities to master given tasks are likely to mobilize greater effort and sustain it than if they harbour self-doubts and dwell on personal deficiencies when difficulties arrive” (Bandura, 1997, p. 106). This is especially salient during the early stages of skill development. Bandura (1997) opined that

[d]uring formative years, the significant models in people's lives play a key role in instilling beliefs of their potential and power to influence the direction their lives take. These self-beliefs shape basic orientations to life. People who triumph over severe adversities provide some of the most striking testimony of enduring persuasory influences (p. 106).

The fourth source of efficacy information forwarded by Bandura was conveyed through a person's physiological and affective states. These involve an individual's bodily functions as well as emotional experiences during task engagements. Bandura (1997) maintained that people determined their capabilities based on "somatic information conveyed by physiological and emotional states" (p. 106) which helped them to "judge their capableness, strength, and vulnerability to dysfunction" (p. 79). The physiological and affective indicators "are especially relevant in domains that involve physical accomplishments, health functioning, and coping with stressors" (Bandura, 1997, p. 106). Understanding one's physiological and affective states therefore allows the individual to improve his / her "physical status, reduce stress levels and negative emotional proclivities, and correct misinterpretations of bodily states" (Bandura, 1991a; Cioffi, 1991a, as cited in Bandura, 1997, p. 106). Subsequently, an improved physiological and affective state increases one's sense of self-efficacy to overcome the challenges faced.

Research over the years have affirmed the influence of self-efficacy as a fundamental factor in determining an individual's sense of agency (Bandura et al., 2001; Foster, 2006; Gariglietti et al., 1997; Pajares, 1997; Pajares & Schunk, 2002; Schultz & Schultz, 2008). This is because

beliefs of personal efficacy touch virtually every aspect of people's lives – whether they think productively, self-debilitatingly, pessimistically or optimistically; how well they motivate themselves and persevere in the face of adversities; their vulnerability to stress and depression and the life choices they make (Pajares, 2004, par. 23).

Following that, "understanding critical issues related to our children's sense of self is crucial to understanding the manner in which they deal with all of life's tasks and challenges" (Pajares & Schunk, 2002, p. 4). For this reason, Bandura (1986) asserted that

[e]ducational practices should be gauged not only by the skills and knowledge they impart for present use but also by what they do to children's beliefs about their capabilities, which affects how they approach the future. Students who develop a strong sense of self-efficacy are well equipped to educate themselves when they have to rely on their own initiative. (p. 417).

Further, Pajares and Schunk (2002) were of the view that children's encounters with personal agency were

mediated by adults who can empower them with self-assurance or diminish their fledgling self-beliefs. Because young children are not proficient at making accurate self-appraisals, they rely on the judgments of others to create their own judgments of confidence and of self-worth. (p. 22).

Likewise for Lehman (2007), reading and thinking about literary characters who exhibit self-efficacy allow children to model after the empowering behaviours of these characters. As such, relating fictional events to personal experiences helps readers to imagine "solutions to problems and give them a sense of vicarious accomplishment through these resolutions. Children then can apply or adapt these models to their own lives" (Lehman, 2007, p. 111). In view of that, the paper explores how each of the four sources of efficacy information contributes to Lola Rose's recognition of her agency, leading to the enhancement of her self-efficacy which empowers her to overthrow the instances of body shaming experienced.

RESULTS AND DISCUSSION

Wilson's *Lola Rose* (2003) is narrated from the lens of 11-year-old Jayni. The story begins with her mother, Nikki, running away from Lola Rose's abusive father, Jay. With the £10, 000 that Vicky wins from a scratch card lottery ticket, she brings

along the pre-adolescent girl protagonist and her younger brother, Kenny, to start a new life in London. In order to prevent Jay from tracking them, Nikki takes on the pseudonym Victoria (Vicky) Luck while Jayni adopts the glamorous-sounding Lola Rose¹. Kenny decides to rename himself as Kendall. Soon after, Vicky becomes romantically involved with an art student named Jake who moves in with them. However, the relationship is short-lived when Vicky discovers that she has breast cancer. Jake leaves her after realizing that she has run out of lottery money. As Vicky is admitted into the hospital for surgery, Lola Rose relocates Auntie Barbara, her mother's long lost elder sister for assistance. Auntie Barbara's appearance within the second half of the novel thus provides the source of strength and stability for the runaway family.

Notwithstanding the many forms of abuse which Lola Rose endures from her mother, the paper gives particular attention to the repeated occurrences of body shaming affecting the pre-adolescent girl protagonist. Throughout her growing up years, Lola Rose often observes her mother subjecting herself to objectification by flaunting her body for public viewing. She narrates:

[Mum] did a bit of modeling when she was younger. She's got her own scrapbook with pages cut out of newspapers and magazines. We're not supposed to look, Kenny and me, because Mum isn't wearing a

¹ The paper will henceforth refer to them according to their newly adopted names.

lot and some of the poses are quite sexy. (Wilson, 2003, p. 10).

This communicates an unconscious message that is destructive to Lola Rose's body image. Gilligan (1982) maintained that "girls, in identifying themselves as female, experience themselves as like their mothers, thus fusing the experience of attachment with the process of identity formation" (p. 8). For Orbach (2009), the family is where a girl's consciousness of her body is first acquired, absorbed and transmitted (p. 8). Resulting from Vicky's preoccupation with physical perfection, Lola Rose looks at her own body with a sense of shame and disgust:

I've tried locking the bathroom door and stripping down to my knickers and trying out some of those poses myself. I look *ridiculous* [...] I haven't got a proper figure. It doesn't go in and out in the right places. My hair's wrong too [...] It's boring old mouse (Wilson, 2003, p. 10-11, italics original).

Pipher (1994) noted that "the pressure to be beautiful is most intense in early adolescence. Girls worry about their clothes, make up, skin and hair. But most of all they worry about their weight" (p. 183). Likewise, Orbach (2009) expressed her concern towards young girls who were "made bodily self-conscious and are striking sexy poses in their mirrors which are more chilling than charming" (p. 3). She also cautioned against the damaging "preoccupation with thinness and beauty which has been eroding

individual self-worth" (Orbach, 2009, p. 4). Within the novel, this preoccupation with physical appearance leads Lola Rose to seek external factors to substitute her lack of self-worth. She renamed herself 'Lola Rose' after a model from her scrapbook, believing that the borrowed identity was able to transform her into a physically attractive person and increase her social acceptance. She also convinced herself that owning a new pink furry denim jacket enhanced her physical appeal.

Not only that, Lola Rose was frequently exposed to her mother's acts of body shaming. This was directed both towards Lola Rose and her Auntie Barbara. Vicky made derogatory remarks about their physical built:

'If you think [the hotel cleaning maid] was fat you should see your Auntie Barbara,' said Mum. (Wilson, 2003, p. 67).

'What's with the whale lady? [...] she's a dead spit of your Auntie Barbara.' Mum giggled and adjusted her jeans over her own tiny hips. (Wilson, 2003, p. 111).

'You're starting to sound just like your Auntie Barbara,' said Mum. 'Watch out you don't start to look like her too!' She started poking my tummy. (Wilson, 2003, p. 126).

Vicky's demeaning comments convey to Lola Rose that a person's body size becomes "a primary form of identity" (Conroy, 2015,

par. 7). The repeated emphasis that “fat is bad and thin is good” (Orr, 2009, par. 3) hence invokes within the pre-adolescent girl protagonist “an underlying anxiety” (Conroy, 2015, par. 17) about her own physical imperfections. Throughout her career counselling adolescent girls, Pipher (1994) noticed that “[g]irls are terrified of being fat [...] Being fat means being left out, scorned and vilified [...] Because of guilt and shame about their bodies, young women are constantly on the defensive” (p. 184). For Montemayor and Eisen (1977), physical attributes is one of the vital indications of how young children “conceive of and describe themselves” (p. 315). The preoccupation with a socially accepted physical make up which Lola Rose learns from her mother therefore becomes a detrimental element which undermines her sense of self and identity within the story.

Lola Rose’s first encounter with a healthy body image in the text comes from the cleaning maid of their hotel room in London. The unnamed maid is portrayed as a large-sized lady who nevertheless exudes confidence, self-acceptance and joy. Despite her stature, the maid demonstrates skill and agility in dancing without showing any sense of embarrassment towards her physical attributes (Wilson, 2003, p. 67). By observing her, Lola Rose realizes that physical appearance does not hinder one from living a contented life. Moreover, the maid encourages and guides them to the housing association through which the family eventually secures a flat to start their new lives in London (Wilson, 2003, p. 72-

74). This vicarious experience garnered from the maid raises Lola Rose’s sense of agency and self-efficacy towards her body image.

The second character whom the pre-adolescent girl protagonist meets is Ms. Balsam, the head teacher of her new school in London. Lola Rose describes her as “wasn’t very pretty but she didn’t seem to care [...] her clothes certainly weren’t posh. She was wearing comfy old trousers and a creased jacket with bulging pockets” (Wilson, 2003, p. 96). However, the headteacher exhibits compassion and tact as she bypasses the bureaucratic procedures in order to enrol the children into the school, thereby affording them an opportunity for education. Through the examples of vicarious experience observed from the cleaning maid’s kindness and generosity as well as Ms. Balsam’s benevolence despite their unattractive physical built, Lola Rose’s self-efficacy is enhanced to withstand the acts of body shaming experienced.

The body shaming which the pre-adolescent girl protagonist experiences continue to worsen when Vicky begins a relationship with Jake. In the aftermath of an argument with Lola Rose, Vicky ridicules her physical features: “‘Don’t kid yourself *you’ll* ever get a man like Jake,’ she said looking me up and down” (Wilson, 2003, p. 119, italics original). Consequently, Lola Rose’s body image is affected:

I’d hoped I’d grow up little and pretty like Mum. I’d so hope it might happen when I turned into

Lola Rose. But now I wondered how I'd kidded myself. Mum had made it obvious. I wasn't ever going to look like her. I'd end up like Auntie Barbara instead" (Wilson, 2003, p. 120-121).

Although she is unable to resist her mother's damaging acts of body shaming, Lola Rose is nevertheless able to stop the teasing of the neighbourhood boys:

'Give us a kiss then, Lola Rose,' [Peter] called.

I pulled a face at him. 'Get lost, Peter Piglet,' I said fiercely [...]

The other boys laughed, and made more kissing noises [...] I hurtled down the street away from them. I ran and ran away from their raucous laughter (Wilson, 2003, p. 121-122).

This represents her enactive mastery experience in resisting their sexual harassment. Through the incident, her sense of agency and self-efficacy are enhanced.

As the story progresses, Vicky continues to show off her thin figure which earns Jake's affection and praise: "I think [your figure] is gorgeous,' said Jake. Mum beamed and nodded her head at me, as if to say, *So there!*" (Wilson, 2003, p. 124, italics original). Due to that, Lola Rose's self-esteem gradually diminishes. When Kendall likens her to a fish (p. 129), the pre-adolescent girl protagonist's body image plummets: "I just wished I *looked* more

like my idea of Lola Rose" (Wilson, 2003, p. 129, italics original). This corroborates Orbach's (2009) observation that

[c]hildren who feel that they are unloved can believe that there must be something very wrong about them which makes them unacceptable. The stinging sense of being not right causes them confusion and hurt, but they do not give up the desire for love and acceptance [...] their pursuit of love and acceptance will dovetail with an attempt to change themselves into someone the child himself can accept (p. 18-19).

The influence of Vicky's body shaming sets within Lola Rose a mindset that her body must conform to an ideal physical type in order to secure love and acceptance. According to Pipher (1994), girls are increasingly measuring their own bodies to "cultural ideals and find them wanting" (p. 184). In her desperate desire to seek validation, Lola Rose attempts to assimilate her mother's image onto herself by adorning Vicky's make up and clothes. She then parades herself around the neighbourhood to covet social acceptance (Wilson, 2003, p. 129-130). The attention which the pre-adolescent girl protagonist garners from her neighbours temporarily pacifies the emotional effects of the body shaming experienced (Wilson, 2003, p. 131-133), thereby increasing her physiological and affective states.

Nevertheless, Lola Rose remains insecure in her value and self-worth. She admits:

I couldn't convince myself. I could call myself Lola Rose until the cows came home but I was still stuck being shy, soft old Jayni. I was never going to get pretty and sparky and sexy like Mum. I was going to get bigger and blobbier and end up like Auntie Barbara, just as Mum said. Poor elephantine Auntie Barbara who was so wibbly wobbly that no man would ever want her. Maybe no man would ever want me. (Wilson, 2003, p. 134).

The passage shows how the pre-adolescent girl protagonist is affected by her frequent experiences with body shaming. These lead her to think that being fat isolates and invalidates a woman. Similarly, Pipher (1994) worried about how girls "have been culturally conditioned to hate their bodies, which are after all themselves" (p. 184). The excerpt above clearly shows how Lola Rose exhibits a sense of self-loathe towards her own body. Convinced that securing a man's affection is the only means of regaining her self-worth, Lola Rose hence sets out to display herself to the neighbourhood boys whose sexual advances she previously rejected. In their presence, she allows herself to be objectified. At the same time, she fantasizes about being romantically involved with Ross, the leader of the group. According to Orbach (2009), "[g]irly-sexy culture now entrances more rather than

fewer of us. Putting the body on show and making it appear 'attractive' are presented as fun, desirable and easily accessible" (p. 2). Resulting from that, Lola Rose is sexually assaulted (Wilson, 2003, p. 135-137).

Through her enhanced sense of self-efficacy, however, the pre-adolescent girl protagonist is empowered to resist the sexual aggression by shouting for help. Her cries catches the attention of Ms Balsam, who happens to be walking her dogs nearby (Wilson, 2003, p. 137-138). The headteacher rescues Lola Rose and accompanies her home. During their journey, Ms Balsam affirms Lola Rose's self-worth and value: "You *are* somebody, Lola Rose. You're a very special, clever, creative girl, and very mature for your age too" (Wilson, 2003, p. 140, italics original). This act of verbal persuasion enhances the pre-adolescent girl protagonist's self-efficacy. When Jake degrades her in the following scene, Lola Rose is able to regulate her emotions and manage her disappointment:

'Look!' I copied one of Mum's favourite poses, head tilted up, mouth slightly open, chest thrust forward, hand on hip, one knee slightly bent. 'For God's sake,' said Jake cruelly. I rushed off to the bathroom, not wanting Jake to call me a crybaby too. 'I hate him,' I muttered, hugging myself. (Wilson, 2003, p. 159).

This enactive mastery experience empowers her to endure the persistent onslaught of body shaming experienced.

As her self-efficacy increases, *Lola Rose* displays a better sense of body image. This is exemplified when she comforts her mother who laments about her aging skin (Wilson, 2003, p. 174).

Auntie Barbara's arrival into their lives in the second half of the story further reinforces *Lola Rose*'s self-efficacy against the occurrences of body shaming within the novel. Although portrayed as "a very large woman" (Wilson, 2003, p. 217), Auntie Barbara is regarded as a stature of stability and security. This presents a stark comparison against Vicky's small physique which lacks warmth and safety:

Whenever I hugged Mum hard she always teetered on her heels and said, 'Careful, you'll knock me over.'

'No one could knock Auntie Barbara over. She didn't budge an inch. She stayed still, like a well-upholstered sofa, while I leant against her and cried on the big soft cushion of her chest (Wilson, 2003, p. 217).

The pre-adolescent girl protagonist also observes how her aunt models natural beauty and confidence without resorting to make-up or other enhancement products. Auntie Barbara's body image, self-esteem and social acceptance are neither dependant on her physical size nor easily threatened by the impression and reception of other characters within the novel (Wilson, 2003, p. 218-219; 231; 287). On the contrary, she demonstrates contentment and self-

sufficiency by adapting her lifestyle to complement her large features: "She makes most of her clothes because she's so huge she can't find anything in the shops" (Wilson, 2003, p. 229). *Lola Rose* thus derives vicarious experience through Auntie Barbara's healthy body image. In addition, she finds solace in seeing how her aunt indulges in eating without feeling any sense of guilt or self-condemnation. Instead, Auntie Barbara is able to joke about her size (pp. 220-221; 237). When *Lola Rose* laments that she does not inherit Vicky's physical attributes, her aunt verbally persuades her: "I don't think you need take after anyone. You're yourself. Unique. The one and only Jayni" (Wilson, 2003, p. 221). These sources of efficacy information obtained from Auntie Barbara thus enhance the pre-adolescent girl protagonist's sense of agency and self-efficacy which empower her to subvert the effects of body shaming experienced.

As *Lola Rose*'s self-efficacy develops, she is able to better resist the instances of body shaming encountered. She opposes her classmate's pre-occupation with thinness and speaks out against the body shaming directed at Auntie Barbara (Wilson, 2003, p. 234-235). These examples show the transformation of the pre-adolescent girl protagonist's mindset from being fixated on mere physical appeal to one that embraces a healthy body image. Trites (1997) opines that "[t]his reconnection with the community is only made possible by the words of a woman's narratives that validate the girl's sense of self" (p. 127). In Wilson's *Lola*

Rose, it is the vicarious experience which Lola Rose receives from the hotel maid, her headteacher and her Auntie Barbara which enhance her sense of self and perceived efficacy.

When Jay reappears in the novel, the pre-adolescent girl protagonist witnesses her Auntie Barbara's resistance against his attempt at body shaming Vicky (Wilson, 2003, p. 244). Through this example of vicarious experience, Lola Rose learns empowerment to defend both her mother and her aunt against her father's insults (Wilson, 2003, p. 257; 264; 285). Seeing how Vicky loses her hair and puts on weight during the cancer treatment also awakens Lola Rose to the frailty of a person's physical appearance and the temporal security that it offers. From her enhanced sense of self-efficacy, the pre-adolescent girl protagonist is able to complement her Auntie Barbara in restoring Vicky's body image and sense of self (Wilson, 2003, p. 282-285). The novel concludes with Lola Rose affirming her mother's worth and value independent of her physical outlook: "We all knew Mum could still pull any bloke she fancied, fat or thin" (Wilson, 2003, p. 288).

Through her enhanced sense of self-efficacy gained from the sources of efficacy information such as enactive mastery experience, vicarious experience, verbal persuasion, and improved physiological and affective states, Lola Rose is empowered to resist and overthrow the detrimental influences of body shaming throughout the novel. She eventually adopts a healthy body image and learns that her self-worth is neither dependant on body size nor

men's validation. Rather, she celebrates the uniqueness of her individuality as the authentic reflection of her value and worth. In line with Orbach's (as cited in Orr, 2009) argument that "human bodies have never been merely the product of the genetic imprints they inherit, but are shaped by upbringing" (par. 11), the discussion therefore highlights how a children's text "is ideologically explicit in depicting the rejection of stereotypes as a weapon children can use against societal pressure to conform to traditional gender roles" (Trites, 1997, p. 23). As such, the paper concurs with Orbach (as cited in Orr, 2009) that "we need to be more robust [...] in defending ourselves, and our children, against such balefully disruptive psychological pressures" (par. 13). There is indeed much to be done in helping our children accept their own bodily features, one of it is through using literary works to instill a sense of healthy body image within young girls.

CONCLUSION

Despite the concerns surrounding Wilson's contemporary realistic children's novels addressed at the outset of the paper, the discussion argues for the importance of analyzing her works. Specifically, it highlights how these works can be useful tools to empower children in overcoming the threats of body shaming. Through understanding how Lola Rose's self-efficacy is enhanced via enactive mastery experience, vicarious experience, verbal persuasion, and improved physiological and affective states as proposed by Bandura, the paper

strengthens Guerra's (2012) claimed that "[l]iterature is powerful in its capacity to introduce new ideas and contribute to belief formation" (p. 386). Concluding, the study echoes Pajares' (1997) contention that

[a]s the world shrinks, attempting to understand to what degree the effects of self-efficacy are universal across cultures seems more critical than ever. Cross-cultural research will help clarify how efficacy beliefs are created and develop as a result of different cultural practices, as well as how these differing cultural practices influence children's efficacy beliefs (par. 88).

In particular, the emphasis on healthy body image aims to show how young girls "can learn to recognize the forces that shape them and make conscious choices about what they will and won't endure [and] become whole adults in a culture that encourages them to become forever the object of another's gaze" (Pipher, 1994, p. 253). The findings of this study therefore hope to contribute in helping young girls develop a strong sense of self-efficacy to combat the societal pressures seeking to objectify their bodies.

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English Language Teachers' Practices of Online Professional Development using Facebook

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ABSTRACT

Social Networking Sites (SNS) are a relatively new strand of the Internet, and are rapidly emerging as a popular and meaningful platform for teachers to engage in online professional development activities (OPD). However, literature indicates that very little studies have been done on how teachers actually use SNS, specifically Facebook, for professional development. Hence, their practices and experiences of Facebook for professional development are not well understood. Therefore, this study, which involved 113 English language teachers, was undertaken with the aim of understanding English language teachers' practices of online professional development using the Facebook platform. Findings do indicate how Facebook may have contributed to teachers' OPD. This has meaningful implications for planners and organizers of teacher development programmes to better integrate Facebook in enhancing teachers' meaningful learning and experiences, particularly during their professional development.

Keywords: Facebook, online professional development, social media, social networking sites

INTRODUCTION

The Internet (including Web 6.0), with its capacity for creating connections and interconnections, creative capabilities, interactivity and sharing resources, holds huge promise to host effective professional development activities and programmes for English language teachers. This is also known as online professional development (OPD), which refers to,

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...activities, programmes, opportunities, or experiences, undertaken using the Internet (and its tools) by teachers, leading to the achievement and, later, the enhancement of the preset objectives of individuals or groups in a learning context that may be identified by themselves or their institutions (Kabilan, 2004a, p. 51).

OPD could be informal, i.e. initiated by themselves for their own personal and professional needs and interests or it could be formal, whereby the OPD is planned, designed and implemented in a formal setting, with structured and specific learning objectives and outcomes that are determined and guided by systematic activities, engagements and instructions. For the purpose of this study, OPD refers to both formal and informal structures and, could be more effective than face-to-face (F2F) professional development (in certain aspects) since the Internet overcomes territorial and geographic boundaries, and cuts time and financial constraints. Moreover, the emergence of social media (such as Facebook, Twitter and WhatsApp), has brought teachers from all over the world even closer than ever before. These factors, combined with the status of English as the *lingua franca*, highlights the significance of English language, as the inter-national language of a modern and globalized world (Jenkins, 2008).

The reality is, that the Internet has transformed into a dominant platform for the spread of English (Danet & Herring,

2007), facilitating English language teachers from different parts of the world, to create opportunities for networking with colleagues and experts in English language teaching (ELT). The benefits include learning new ideas, information and developments in ELT and other (un)related fields, as well as creating, developing, finding and sharing materials and resources extensively. This helps to establish global communities of practicing English language teachers and breaks down barriers that may discourage teacher professional development. Internet helps in uniting teachers from diverse contexts, whilst engaging in meaningful and purposeful professional development that are universal in nature.

Studies show that OPD enhances teachers' capabilities of creating and orchestrating an ideal classroom atmosphere for effective teaching and learning of English. For instance, the sharing and exchanging of knowledge via Internet enhance teachers' interaction and communication with learners, whereby they constantly switch roles from teachers to learners and vice versa with the idea of sharing "common learning goals and strive to create a common ground in which to share their experiences" (Alvarez & Olivera-Smith, 2013). Such experiences would also lead to teachers gaining "a rich treasury of teaching ideas through the responses of group members to [their] own and others' questions" and allow them to solve problems in their teaching based around principles of "collective exploration, play and innovation" and their abilities "to connect to specialized

information nodes and sources as and when required" (Selwyn, 2011).

Research in the area of teachers' OPD – using synchronous or/and asynchronous tools – is available in abundance since the new millennium and they indicate positive learning and experiences (Chen et al., 2009; Dash et al., 2012; Kabilan & Embi, 2006; Rienties et al., 2013; Yang & Liu, 2004). However, research in the use of Social Networking Sites (SNS), a relatively new strand of the Internet, for teacher's OPD is just recently emerging with very little studies exploring how teachers actually use SNS for professional development. Veletsianos (2012, 2013), for instance, pointed out that, in the higher educational contexts, scholars' and educators' practices and experiences of SNS were not well understood since they were inadequately researched. There is also little evidence of teachers' uses of social network "particularly with reference to groups of teachers on Facebook" (Ranieri et al., 2012), and in terms of creating professional learning communities (Bissessar, 2014). Most likely, as explained by Rutherford (2010) earlier, the scarcity of research in this area was due to the 'vast and uncharted waters of social network sites (which) remains to be explored as scholars currently have a limited understanding of who is using these sites, and why they are using these sites'.

Therefore, this study is undertaken with the aim of understanding English language teachers' practices of online professional development using the Facebook platform. The specific research questions for this

study are: (i) 'What are the English language teachers' practices of online professional development using the Facebook platform?' and; (ii) 'How do English language teachers make use of Facebook to enhance their professional development?'

Examining the teachers' professional practices of Facebook would inform us on how Facebook may contribute to teachers' OPD as well as, aiding planners and organizers of teacher development programmes to better integrate the Facebook in enhancing teachers' meaningful learning and experiences, particularly during their professional development. Another significance of this study is that teacher educators around the world will gain valuable insights into how Facebook could be integrated in the training and professional development of future teachers. Therefore, these future teachers would have the experience, knowledge and skills and, are able to incorporate Facebook meaningfully (formally or informally) into their own teaching and learning. This is crucial, as teachers need to be engaged with students and "provide a rich discursive environment, and not merely to provide ad-hoc opportunities for use in a classroom." (Chandler, 2013).

LITERATURE REVIEW

In a review of literature, Kabilan (2004b) concluded that there were five aspects of teacher competencies that teachers could attain when they undertook OPD: (1) motivation; (2) skills, knowledge, and ideas; (3) self-directed learning; (4) interactive

competence; and (5) computer technology awareness and skills. The above are possible because the Internet is a huge virtual “oasis of knowledge” (Schrum, 1995) that has the ability to create “collaborative professional culture among the teachers” (Becker, 1999), even more so in the era of Web 6.0 whereby, it permits ‘hybrid learning spaces that travel across physical and cyberspaces according to principles of collaboration and participation’ (Greenhow et al., 2009). In addition, teachers are able to link up or create independent information, linkages and applications and share them among teachers and thus, build and develop a network of teachers and “increase the number and range of people to consult for feedback or support” (Greenhow et al., 2009). Such networks foster professional learning that increases peer discussions of content and teaching practices, which then positively affect teachers’ knowledge and practice (Masters et al., 2012). An example of this positive change is presented in a study of English language teachers’ pedagogical transformation that leveraged on the affordances provided through the integration of SNS, which resulted in the teachers foreseeing themselves more as a facilitator than a “point person when it came to teaching.” (Archambault et al., 2010).

Literature points out that SNS has great potentials in augmenting and enriching the professional development of English language teachers. For instance, Cruz-Yeh (2011) found that Facebook could help English teachers: (i) gain knowledge about teacher professional development

opportunities that are available online; (ii) access real time links to teaching resources, web pages and online events related to teaching and learning and, (iii) to be connected with other English teachers. Roach and Beck (2012) demonstrated how a language teacher’s sharing of her experiences, beliefs and ideas in Facebook eventually led to meaningful professional development that included extending networking with colleagues and students, being more aware of literacies and pedagogies and, thinking and reflecting of one’s development as a professional. Apart from Facebook, Kim and Jang (2014) found that by using other SNS such as podcasting and blogging, English language teachers were engaged in dialogic practices in developing innovative teaching methods, enhancing their professional identities, encouraging educational engagement and augmenting teachers’ active learning.

Lieberman and Pointer-Mace (2010) earlier foresaw the above professional learning initiatives as ‘Growing your own’ professional development that had value and meaning to the daily classroom decisions a teacher had to make and thus, influenced and affected classroom teaching and learning. Lieberman and Pointer-Mace (2010) strongly believed, that, Facebook, and other social media, facilitated professional learning and development that were “intentionally local, humble sustainable, and intended to nourish both individuals and their communities” through the sharing of practices with others that “starts with us.” This is based on the premise that making and sharing practices,

artifacts, events (of practice) and reflections on practice in a public forum or platform (such as Facebook, Twitter and Blogs) improve teaching and benefit other teachers (Kabilan et al., 2010; Lieberman & Pointer-Mace, 2010).

The interconnections, creative capabilities, and interactivity of Web 6.0 described above would facilitate teachers to immerse culturally in the virtual environment and participate in a community of practice, whereby teachers are able to engage with each other in various OPD activities and programmes with the aim of enhancing their professionalism through improving their practices (Jenkins, 2008; Kabilan, 2004a, 2004b). With the emergence of SNS, exploration into OPD has intensified into the realms of social constructivism whereby social interactions are seen as an overarching embodiment to build and expand teacher networks, share information and practices and, promote autonomous and collaborative efforts in teaching and learning.

In the process of sharing information using Facebook, teachers are actually “communicating with larger audiences with whom they might have no personal relationship, but are doing so because they perceive the value of sharing their knowledge with the larger public” (Beach, 2012). The potentials of Facebook, particularly in sharing and showcasing ideas and materials in a collegial and collaborative manner, are immense and are very much parallel to the notion of a member of a community of practice. The teachers are in a “familiar territory” and can handle

themselves competently i.e. through the community of practice (CoP) in Facebook, the teachers experience competence and are “recognized as competent” as well as having the knowledge and skills on “how to engage with others” (Wenger, 1999).

In terms of OPD, Wenger’s (1999) notion of CoP is integral and explains important ideas related to the professional development of teachers such as teacher engagement, teacher learning and teacher practices. CoP is basically an activity system or groups of people or participants, who share understandings about what they do and what that means in their lives and community (Lave & Wenger, 1991). In experiencing OPD, a teacher functions as an active member of a CoP through a complex socialization process with fellow teachers by engaging in various online activities using different online platforms that lead to meaningful OPD experiences, which then enhance and solidify teachers’ learning processes (Schwen & Hara, 2004) and teacher competency (Kabilan, 2004b). The Internet technologies have the capability to improve teachers’ abilities not only to learn and develop independently and autonomously but also “to work simultaneously in a collaborative environment with fellow teachers” (Kabilan, 2004a). Online interactions via Internet technologies also enable teachers

...to map their thoughts and ideas carefully, and reflect on others’ ideas before responding to the concerning issues. The responses were then available for others

(and the teacher) to see, to digest, to formulate, and to evaluate in relation to the teachers' needs and learning outcomes. The teachers would be then able to self-direct and manage their consequent process or course of action, depending (and based) on the outcomes and analyses of their initial evaluation. (Kabilan, 2004a, p. 54).

Cevik et al. (2014) concurred with the above impact of OPD via Facebook on teachers' learning and interaction as they discovered that teachers' overall professional development was enhanced and they had become more "capable of integrating novel technology and solving learning problems in real-life teaching settings". Such professional development experiences are even more important in the 21st century learning environment or spaces where teachers need to "share and develop their skills and resources" (Blair, 2012) in order to engage learners in meaningful learning in creating 21st century learners.

METHODS

Participants and Sampling Technique

This study was carried out in 37 schools, in the northeast district of the Penang Island. This district was identified mainly because of two reasons. Firstly, the identified schools include both high-performing and low-performing schools which can be found in this district. These schools' performance was identified by their overall achievement in the national examinations. Secondly,

the location of the identified schools are relatively close to each other, thus enabling the researchers to easily distribute and collect the questionnaires from the participating teachers. A quantitative survey study exploring the English language teachers' general practices of OPD using Facebook and their views on how English language teachers made use of Facebook to enhance their professional development would be appropriate in answering the two research questions. For this purpose, two hundred (200) English teachers were chosen from the 37 schools to participate in the survey using the criteria sampling technique i.e. the teachers were identified by simply asking if they had Facebook accounts. Teachers without Facebook accounts were not chosen as participants for this study. The researchers visited all the 37 schools and obtained permission from the principals of the schools to distribute the questionnaire to the teachers. (Note: Prior permission from the related agencies such as the Ministry of Education and State Education Department were also obtained). The questionnaires from each school were collected once the teachers completed them (This was done on the day of the school visit).

Instrument and Data Analysis

The instrument used in this survey was a questionnaire that consisted four sections. Section I sought demographic information of the teachers' teaching experience and qualification. Section II attempted to obtain information regarding the use of Facebook by the English language teachers. Section

III identified the professional development activities that the English teachers were engaged in using the Facebook environment. This construct, which used a 5-level Likert scales of 'Always to 'Never, had a very high Cronbach alpha score of 0.86. Section IV comprised of items enquiring information on the Facebook tools that were used by English teachers for professional development activities and used a 4-level Likert scale of "Very Important" to "Not important at all". This construct has a Cronbach alpha score of 0.85. The above two constructs were developed by the authors based on previous studies that examined the practices and experiences of using Facebook (Bissessar, 2014; Kabilan et al., 2010; Rutherford, 2010) and other computer-mediated-communication (CMC) and ICT tools for language learning and teaching (Kabilan, 2016; Kabilan & Embi, 2006).

The items for the above constructs were then refined and aligned to address the two research questions of this study. An open-ended item ('How do the tools contribute towards enhancing your professional development? Please explain with examples') was also included to describe and explain the quantitative data.

For the analysis of the demographic data, frequency and percentages were used; whereas for the description of items in the construct, mean scores, frequency and percentages were employed to describe the English language teachers' practices of Facebook for professional development. As for the open-ended item, the teachers' views were categorized into emerging themes and

analyzed using situation and activity coding strategies (Bogdan & Biklen, 1992). The situation codes were assigned to units of data that described how the English language teachers defined and practiced in using Facebook for professional development, as well as to identify the situations in which the utilization of Facebook would be important and meaningful in terms of enhancing their professional development. The activity codes were assigned to units of data that described the English language teachers' regularly occurring behavior (i.e. engaging in professional development activities), such as collaborating with other teachers (using 'Group') and sharing experiences (using 'Comments'), that were transpired as a consequence of their activities in FB.

The qualitative data were used to support and give meaning to the quantitative data analysis, and for systematic analysis and presentation of each teacher's responses. The teachers were coded, as T1, T2, T3... T200, respectively. The comments from the respondents were cited as they were expressed or stated by the English teachers and identified by their respective codes.

RESULTS

Out of the 200 questionnaires distributed to the identified English teachers, only 113 teachers returned their completed questionnaires. Those who did not return the questionnaires were teachers who were absent or were attending official events elsewhere or, were on medical leave. Table 1 shows the demographic profile of the respondents. Majority of them were

Table 1
Demographic profile of respondents

	Group	Participants (f)	Percentage (%)
Gender	Male	14	12.4
	Female	99	87.6
Age	< 29 years	25	22.1
	30 – 39 years	57	50.4
	40 – 49 years	27	23.9
	50 – 59 years	4	3.5
Teaching experience	1 – 5 years	30	26.5
	6 – 10 years	36	31.9
	11 – 15 years	17	15.0
	16 – 20 years	16	14.2
	21 – 25 years	10	8.8
	26 – 30 years	4	3.5
Highest academic qualification	Bachelor	92	81.4
	Masters	21	18.6

female teachers and almost one-third of the respondents were teachers who had ample teaching experience i.e. had taught more than 5 years (73.4%).

Facebook Use

More than half of the English language teachers in this study said that their Facebook account was based on a 'General Profile' (f=78; 69%), whereas only 35 teachers (31%) had set up their Facebook accounts in the 'Professional Profile' mode. Nevertheless, teachers had mixed reactions in terms of the type of profile that they preferred in the interview. For example, T2 felt that the general profile 'is sufficient to be used for my professional practices' and also because this facilitated 'easier usage' of Facebook for professional purposes. This ease of usage concept was also emphasized by T3, especially in sharing practices and experiences with fellow teachers and others:

Well, I think I am comfortable using general profile because besides my colleagues, other members will be able to know and get idea about my practices. For example, some of my friends and cousins benefit from viewing my profile because I do discuss about my experiences as a teacher and share link...even blogs on my page.

On the other hand, T4 set up a purely professional Facebook account, as he wanted his account to be accessed by his 'colleagues', 'other educators around the world' and 'students' for 'this specific purpose of education' and did not wish to disclose 'any of my personal information'. T17 concurred with T4 to a great extent, but had a more open, philosophical and profound view of having a Facebook account. By setting up a dual mode i.e. general and professional profile, T17,

utilized Facebook as a platform to enhance professional development, as well as ensuring that his students benefited from their learning engagement in a secure and safe Facebook environment:

I have both general and professional profile. Many don't see the importance of having professional profile as for their practices. By setting professional profile, I can control who can view information pertaining my educational work. I have set up groups for my class students, for my English department. Most importantly, these profile members are more focused on the content they are reading, sharing with me.

In terms of frequency of logging into Facebook, teachers in this study were active users i.e. 106 teachers (93.8%) log in 4 times or more per day (Table 2) with 44 teachers (38.9%) login between seven to nine times per day.

English Language Teachers' Practices of OPD using Facebook

Table 3 and Table 4 show the mean scores, frequency and percentages (respectively) for the use of Facebook for OPD practices i.e. the professional development activities that English language teachers undertake using Facebook. Data show that seven items have a mean score of more than 4.0, which indicate that the teachers in this study are frequently engaged in the

Table 2
Frequency of Facebook login (daily)

Login times (per day)	Frequency				
	1-3	4-6	7-9	10-12	12
f (%)	7 (6.2%)	22 (19.5%)	44 (38.9%)	37 (32.7%)	3 (2.7%)

Table 3
Mean scores of frequency of the use of Facebook for OPD

Items	Mean	Std Dev.
To share educational information	4.63	160.5
To view posts on language oriented posts	4.60	168.9
To share TESOL ideas	4.54	147.1
To collaborate with other English teachers	4.52	142.7
To tag colleagues' useful posts on teaching	4.30	130.5
To discuss new innovation for classroom teaching	4.25	111.7
To share teaching materials	4.19	115.3
To share experiences of other TESOL teachers	3.12	49.4
To add educational application	2.70	53.9
To organize educational events with other English teachers	2.31	36.7

respective PD activities using Facebook. These seven PD activities are sharing educational information (mean score= 4.63; f=110, 93.8%), viewing posts on language-oriented posts (mean score= 4.60; f=100, 88.5%), sharing TESOL/TESL ideas (mean score= 4.54; f=100, 93.8%), collaborating

with other teachers (mean score= 4.52; f=113, 100%), tagging colleagues useful posts on teaching (mean score=4.30; f=89, 78.7%), discussing new innovation for classroom teaching (mean score=4.25; f=96, 85%) and sharing teaching materials (mean score= 4.19; f=99, 87.6%).

Table 4
Frequency and percentage of use of Facebook for OPD

I engage in the following PD activities using Facebook	Never		Rarely		Sometimes		Frequently		Always	
	n	%	n	%	n	%	n	%	n	%
To share educational information	0	0	0	0	3	2.7	36	31.9	74	65.5
To view posts on language oriented posts	0	0	0	0	13	11.5	20	17.7	80	70.8
To share TESOL ideas	0	0	0	0	7	6.2	38	33.6	68	60.2
To collaborate with other English teachers	0	0	0	0	0	0	54	47.8	59	52.2
To tag colleagues' useful posts on teaching	0	0	7	6.2	17	15	25	22.1	64	56.6
To discuss new innovation for classroom teaching	1	0.9	0	0	16	14.2	49	43.4	47	41.6
To share teaching materials	0	0	0	0	14	12.4	64	56.6	35	31.0
To share experiences of other TESOL teachers	15	13.3	23	20.4	46	40.7	12	10.6	70	61.9
To add educational application	14	12.4	39	34.5	4	3.9	0	0	16	14.2
To organize educational events with other English teachers	25	22.1	53	46.5	21	18.6	3	2.7	11	9.7

In relation to the above proliferation of knowledge and practices, the key question that arises is ‘How do English language teachers make use of Facebook to enhance their professional development?’

Teachers in this study identified seven main tools of Facebook that they felt were important in enhancing their PD (see Table 5 and Table 6) with the ‘Pages’ as the main tool (mean score= 3.46; f=113, 100%). Teachers did indicate, through qualitative data, that the ‘Pages’ and ‘Groups’ tools support their professional needs and interests:

Pages and Groups become a peer-supporting tool. By joining page like English Language Centre, I get informative feedback from educators and colleagues who are expert in language (T99)

I am able to communicate or get in contact with other educators around the world by joining groups /pages. This ‘Pages’ that I joined is very close to my need and interests such as English Teachers Club, Teaching English-British Council (T87)

A FB tool that is very much related to the 'Pages' and 'Groups' tools is the 'Like' tool. T9 explained how by clicking on the 'Like' icon directed her to other related online resources that she was interested in. T9 further explained that when she liked the relevant 'Pages', it helped her to 'support language teaching' and she made sure that she only chose 'Pages' that were 'important to my profession'. For example, T17 elucidated how the British Council Page provided useful materials for teachers and T18 elaborated how the 'Fun English' Page also provided a variety of teaching ideas and materials, which later she adapted and adopted them for her classroom teaching and learning.

Sharing ideas via links is also another important PD activity in FB. With a mean score of 3.32 (f=111, 98.2%), links in FB enable T16 to share ideas and reflect on her teaching profession. T23 agreed and further clarified that reading links forwarded by other educators facilitated her to 'get some

ideas to develop myself' and in turn she also forwarded the links to her own colleagues so that 'they benefit it as they read it'. Sharing crucial and important information via the notification tool in FB is also vital for the English language teachers (Mean score= 3.28; f= 113; 85%), as it is a tool that enables collaboration among teachers in the schools especially when teachers receive the latest

Table 5
Mean scores of the importance of the use of Facebook tools for OPD

Facebook Tools	Mean	Std Dev.
Pages	3.46	113.3
Professional Groups	3.32	113.9
Links	3.32	109.4
Notification	3.28	116.9
View/upload videos	3.27	118.8
Comments columns	3.10	130.0
Like	3.03	97.3
Notes	2.96	137.3
FB Stories page	2.47	32.4
Public polling	2.30	33.3
Educational application	1.98	61.4

Table 6
Frequency and percentage of the importance of the use of Facebook tools for OPD

Importance of the Use of Facebook Tools for OPD	Not at all important		Slightly important		Important		Very Important	
	n	%	n	%	n	%	n	%
Pages	0	0	0	0	61	54.0	52	46.0
Professional Groups	0	0	0	0	77	68.1	36	31.9
Links	0	0	2	1.8	73	64.6	38	33.6
Notification	0	0	0	0	81	71.7	32	23.3
View/upload videos	0	0	0	0	83	73.5	30	26.5
Comments columns	0	0	1	1.8	92	69.2	18	13.5
Like	0	0	18	15.9	74	65.5	21	18.6
Notes	7	6.2	0	0	96	85.0	10	88.0
FB Stories page	26	23.0	33	29.2	29	25.7	25	21.1
Public polling	27	23.9	38	33.6	35	31.0	13	11.5
Educational application	25	22.1	29	25.7	47	41.6	0	0

educational information. It is a tool that notifies 'the trending issues in the world of education' (T45).

DISCUSSION

Though quantitative data indicate that most of the teachers in this study have and prefer a general profile, qualitative data point to the fact that teachers utilize both types of profiles in enhancing their profession as teachers. Findings indicate that the profiles are platforms for teachers to engage in "continued professional networking" that allow for posting queries, resource needs, professional opportunities and career updates (Staudt et al., 2013). This implicates that the teachers are willing to share information, engage with fellow teachers in a community of practice, and explore and form new connections with common interests and needs. Hence, these teachers are most likely to create and maintain greater amounts of social capital than an individual with a small, constrained network (Staudt et al., 2013). With greater social capital, Johnson et al. (2011) argued that teachers' resources were increased, as they were able to "access through peer collaboration to support their ongoing learning by introducing new resources into the teachers' social network or by improving the teachers' access to the resources that already existed in that network" (Johnson et al., 2011).

The above nexus between social capital and professional development of English language teachers, are exemplified in the main findings of this study. The items

that have the highest mean scores and frequencies (see Tables 3 and 5) reflect three main OPD activities of a true professional learning community i.e. (i) sharing educational information, ideas, and materials; (ii) collaborating with others and (iii) creating and maintaining resources. The above OPD practices by teachers in this study are transpired as a result of exchanges of expertise and resources through interactions among the teachers in Facebook (Kabilan, 2016; Penuel et al., 2009), which are in the form of a community of practice (Wenger, 1999). In this vein, the best practices and innovation are moved quickly, "accelerating knowledge creation and innovation" (Watkins, 2013).

The acceleration of knowledge, creation and innovation stated by Watkins (2013) in the above, illustrate the importance of the use of Facebook tools or features for engaging in meaningful OPD. Quoting Ferdig (2007), Staudt et al. (2013) concurred that in terms of meaningful OPD activities, the Facebook environment was able to: (i) scaffold mentoring; (ii) facilitate active participation (iii) enable creation and/or sharing of discourse artifacts and reflection and; (iv) become a safe space to try out new ideas. These are easily facilitated by the use and application of Facebook tools, as indicated by the participants of this study. It includes public and private messaging via 'Comment' and 'Messages' respectively; posting questions and comments in 'Comment'; sharing resources (such as text, media, and Web links) using 'Share' and engaging with experts and peers in 'Groups'

and 'Pages'. By engaging in all the above activities in the Facebook environment, the teachers underwent informal professional development experiences that are of interest to them since they, on their own accord choose to be involved in those activities. Hence, the teachers are presented with "varied options of empowering themselves with professional skills and knowledge" (Kabilan, 2004b) that are relevant and meaningful to them and their responsibilities as an English language teacher.

Findings from this study have clear and meaningful implications for school administrators and professional development managers/planners. Administrators, managers and planners should think of ways and strategies of connecting teachers to fellow professionals in other schools/districts/state using Facebook. The primary aim should be to enhance and expand their social capital and networks and eventually, their professional development – formally and informally. This could be attained by facilitating, planning and organizing collaborative projects using Facebook, that would have the potential to gather teachers from different schools as a CoP with a common aspiration, work ethics and professional gains (Kabilan, 2016; Schroeder & Greenbowe, 2009). Again, such initiatives and projects could be formal or informal in nature.

Another implication is derived from the fact that the use of Facebook enabled the teachers in this study to experience a much-diversified practice of professional development activities using different

tools available in Facebook. Each practice facilitates a focused and specific kind of professional development experiences, especially the ones that would enhance their teaching and, which is integral to their teaching, as well as the ones that would fulfill their professional needs and interests. Therefore, future professional development activities (formal or informal ones) carried out or planned in Facebook should optimize the use of as many Facebook tools as possible, in order to diversify the activities. Besides that, teachers need to be engaged in various professional development activities, which facilitate rich and meaningful professional development experiences. Such strategy may lead to a more active and constructivist learning process, where the teachers will have more opportunities to engage with others as an expert and as a learner (Darling-Hammond & Mclaughlin, 2011; Rutherford, 2010) within their CoP and thus, energize their social capacity.

CONCLUSION

In a nutshell, the teachers' interaction and engagement with peers and fellow professionals in Facebook (using the various tools available) in this study has expanded and enriched their social capital and their professional involvement in a CoP. It is an indication of the potentials of Facebook in enhancing teachers' access to a vast social capital and extended network, which in turn may develop and increase their capacity to grow professionally, as a result of the meaningful practices and experiences gained through OPD. This, arguably, will lead to

further proliferation and enhancement of knowledge and innovation, if further proper supports and encouragements are given to the teachers. Nevertheless, more research on the use of social media (especially Facebook) for teacher professional development should be explored and expanded. As of now, this is an area that is still at an infancy stage albeit an emerging one – not many published articles or papers on the different use of Facebook for teacher development. From the current study, there are a few critical questions that emerge and need answers or solution: (i) What are the OPD practices undertaken via Facebook that lead to meaningful and useful experiences? (ii) Do the Facebook tools contribute to different professional development experiences? (iii) Does OPD via Facebook contribute or enhance teacher competencies? If yes, what are the OPD practices and what kind of teacher competencies? Addressing these questions would enable practitioners, researchers and planners to plan OPD via Facebook that are based on strong literature and theoretical and pedagogical frameworks in providing useful, meaningful, relevant professional development experiences.

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Psychometric Properties of Raven's Advanced Progressive Matrices with a Sample of Malaysian Youth

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ABSTRACT

The Raven's Advanced Progressive Matrices (RAPM) is considered as one of the most successful measure of general intelligence, particularly the problem-solving and reasoning abilities. However, despite of this, there is no attempt to assess its psychometric properties in Malaysia. To bridge this shortage, the present study assessed the psychometric properties of the 23-item RAPM using a sample of 1,793 Malaysian youth. The assessment involved Rasch Model analysis measurement framework using the following criteria: model assumptions, reliability, construct validity evidence, differential item functioning (DIF), and test targeting. The results showed satisfactory findings from the data for most of the criteria, especially the reliability and validity evidence. Nevertheless, the items in the RAPM was found to lack the ability to target the respondents' general intelligence in the measured scale.

Keywords: Malaysia, problem-solving, Rasch model, Raven's Advanced Progressive Matrices, reasoning ability

INTRODUCTION

The Raven's Progressive Matrices (RPM) was developed to measure problem-solving and reasoning ability (Raven et al., 1998). It includes the ability to perceive and think clearly, find meaning from confusion, and formulate new concepts when faced with novel information (TalentLens, 2011). The RPM is considered by many as the most successful inter-cultural measure of general

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intelligence (Salthouse, 2005), particularly since it was considered as culture-free test (Chen et al., 2017). The instrument (and its forms) has been used in at least 45 countries (Brouwers et al., 2009). In Asian, the RAPM has been studied in countries such as Afghanistan, China, Hong Kong, India, Japan, Malaysia, Philippines, Singapore, South Korea and Taiwan (TalentLens, 2007). In Malaysia, studies on Raven's instrument include the work of Hashmi et al., (2015) using the Coloured Progressive Matrices for students with learning ability, while Amin et al. (2015) used the RAPM in their study among engineering students.

There are many forms of RPM. The Raven's Standard Progressive Matrices (RSPM) contains 60 items presented in 5 set of 12 items. Meanwhile, the Raven's Advanced Progressive Matrices (RAPM), is a more difficult version of the RSPM. The original RAPM contains 36 items with a test-taking time of 40 - 60 minutes. However, because of these time constraints, shorter versions of RAPM are available such as a 12-item version (Arthur & Day, 1994) and an 18-item medium form (Sefcek et al., 2016). Apart from the two versions, simplified version called the Colored Progressive Matrices is also available, which is mainly used to measure those with limited intellectual ability.

Because of its popularity, studies have been conducted in various settings to further investigate the psychometric properties (such as test-retest reliability, convergent validity) of the RAPM, with many of the studies reporting positive results. However,

many of these studies only dealt with test-level statistics such as internal consistency and factor structure of the instrument using raw score measurement theory or classical test theory (CTT) (Bors & Stokes, 1998; Raven, 2000; Wicherts et al., 2010). CTT assumes that a person's score is combination of his or her true ability score, as well as some error in the measurement. It should be noted that both true score and error score are unobservable. Therefore, assumptions are needed in order to measure a person's score. Hambleton and Jones (1993) specified that the assumptions were (1) both unobserved scores are uncorrelated, (b) that the average of the error scores in the population is zero, and (c) that the error scores on parallel tests are uncorrelated. Nevertheless, as rightly observed by Vigneu and Bors (2005), the fact that some items in RAPM are very easy whereas others are relatively difficult resulted in skewed distributions of the items which violate the assumptions of normality in assessing factor structure using CTT. As such, the objective of the present study is to evaluate the psychometric properties of the RAPM using the Rasch Model analysis. This study is significant since information on the psychometric properties of the RAMP will help users to have clean, correct, and useful data that in turns help to interpret the results more appropriately.

The development of item response theory (IRT) and its models provides an opportunity for more stringent analysis of dichotomously scored data. In Rasch Measurement Model framework, which is one family of IRT models, a person's score

can be described by his or her underlying ability through the following equation.

$$P(\theta) = \frac{\exp(\theta - b)}{1 + \exp(\theta - b)} \quad (1)$$

where,

$P(\theta)$ = probability of a person with θ ability is able to answer correctly

b = difficulty of the item

The Rasch Model is a measurement framework that transforms the ordinal raw scores into equal interval measure, which in turns, facilitate linear measurement (Linacre, 2006). This model is increasingly employed to validate instruments (Arsad et al., 2016; Taasim & Yusoff, 2015; Yan & Mok, 2012). Compared to the CTT, Rasch Model analysis is robust towards the normality assumption of distribution and even able to provide person's score with missing data. In addition, the item-level statistics provided by Rasch analysis helps to provide richer interpretations of the data compared to test-level statistics as in the CTT. This includes a more comprehensive evidence of psychometric properties of the instrument such as reliability and validity. In addition, IRT also provides information on the fairness of testing, i.e. whether items in the particular instrument are interpreted similarly by subgroups (such as gender, social economic status, and location) of the sample tested. Moreover, the framework is also reported as having the ability to examine whether the instrument used is able to target the intended sample. These advantages have been documented by the

work of Muis et al. (2009) who studied the psychometric properties of instrument measuring goal orientation using the CTT and Rasch Model approaches. They reported that even though the CTT analyses were able to show evidence of reliability and validity of the instrument, subsequent analyses using the Rasch Model showed that the instrument had several important shortcomings. For example, the items were not targeting the respondents adequately, and that the lower response of the response category (strongly disagree, disagree) also did not function well. Based on the arguments, we believe that the Rasch Model is the preferred model for analysis compared to the CTT.

METHODS

Research Design

The present study adopted a cross-sectional study design, where the data were collected in a single time period. This design was chosen because of its ability to gather large amounts of information from a vast pool of respondents with regards to the psychometric properties of the RAPM.

Respondents

A total of 1,793 youth from five polytechnics in Perak, Pahang, Melaka, Negeri Sembilan and Sarawak participated in this study. The purposive sample included 960 males (53.54%) and 833 females (46.46%). At this time of study, 594 of the respondents (33.12%) were 19 years old, 321 (17.90%) were 20 years old, 780 (43.50%) were 21 years old, and the remainder were 22 years

old. Meanwhile, 603 of the respondents were in their first year study, followed by 281 respondents in the second year, and 909 were in their third year.

Measures

This study employed the 23-item RAPM, a nonverbal assessment in which each item comprises a pattern of diagrammatic puzzles with one piece missing. Respondents were measured through their ability to select the missing photo sheet from a series of possible answers. A total of eight choice answers were given to the respondents. It was dichotomously scored, i. e. an incorrect answer was given 0, while a correct answer was scored 1. In addition, demographic variable such as gender and age were also included. RAPM is a controlled instrument and the permission is required to use the items. However, sample items can be found on the TalentLens website.

Data Collection and Analyses

For data collection, written consents were obtained from the Ministry of Higher Education and respective State Education Departments to facilitate the process. Data gathered were analyzed using the Rasch Measurement Model framework in the following sequence: (1) model assumptions; (2) reliability and construct validity evidence, (3) differential item functioning (DIF) analysis between males and females, and (4) test targeting. The Rasch Model is a measurement framework that requires strict assumptions. Two important assumptions in the Rasch Model analysis are: (1) the

data must fit model's expectations; and (2) the construct being measured must pose a unidimensional property (Linacre, 2006). The assumption of the model-data fit was examined using the infit and outfit mean squares (MNSQ) statistics, in which the values of 0.6 - 1.4 logits are considered acceptable (Bond & Fox, 2015). Meanwhile, the unidimensional assumption is assessed using the Principal Component Analysis (PCA) of residual procedures, in which the most important factor is removed and the goal is to examine whether other factors can be defined from the residuals. Unidimensional assumption is violated when eigenvalue for second construct extracted is more than 2.0 (Linacre, 2006). Also, according to the same author, the scale is considered showing evidence of unidimensionality when the variance explained by the measurement dimension is more than 40%.

The Rasch Model analysis provides a straightforward statistics to assess reliability of the measurement. The item difficulty reliability index provides information on reproducibility of the results. It is calculated as the ratio of true item variance to observed item variance high likelihood that items with high difficulty is actually do have high difficulty measures compared to items with low difficulty. Item difficulty reliability depends on the difficulty variance and the sample size. Wide item difficulty range and large sample size provide high item difficulty reliability values and vice versa. According to Bond and Fox (2015), the values of > 0.80 are

considered as acceptable, while Fischer (2007) acknowledges that the values of > 0.94 as strong.

Construct validity evidence was investigated using the framework provided by Messick (1993). According to this framework, the investigation of construct validity requires assembling evidence for detecting two threats to construct validity, namely, construct-irrelevant variance and construct under-representation. Construct irrelevant-variance involves considerations of whether the measurement made includes unintended constructs. It was detected through the investigation of model-data fit using the infit and outfit MNSQ mentioned above. Meanwhile, constructs under-representation refers to the inability of the measurement to include important aspects of the intended construct. Threat, in terms of construct under-representation, was conducted through visual inspection of the ordering of the item difficulty, where there is no significant gap between subsequent items on the measurement scale. The intended result projects gaps of no more than 0.5 logits between subsequent items in the measured scale (Baghaei, 2008; Linacre, 2006). Meanwhile, DIF analysis is another important statistic in the item-level analysis of the Rasch Model. It provides evidence

whether an item favours one group over another. An item is considered exhibiting DIF if it is interpreted differently by different groups. Evidence of the DIF items is shown by the size of DIF Contrast statistic of > 0.5 logits (Bond & Fox, 2015). In this study, we investigated whether the items were perceived differently by male and female respondents as reported by various studies (Lúcio et al., 2019; Waschl et al., 2016)

RESULTS

The analysis showed that mean of the infit MNSQ is 0.99 logits (SD = 0.08 logits), while mean for the outfit MNSQ is 1.05 logits (SD = 0.17 logits) (*see* Table 1). This is very close to the expected values of 1.00 logits for both fit statistics. Meanwhile, for every item in the RAPM, the infit MNSQ values ranged from 0.86 - 1.14 logits, while the outfit MNSQ values ranged from 0.79 - 1.38 logits. The values are within the acceptable range of 0.6 - 1.4 logits based on guideline by Bond and Fox (2015). With regard to unidimensional assumptions, as depicted in Table 2, the eigenvalue of the second construct is only 1.5, which is below the value of 2.0 set by Linacre (2006). However, the measurement only explained 35.9% of the variance in the construct.

Table 1
Descriptive statistics (in logits)

	Measure	Model Error	Infit MNSQ	Outfit MNSQ
Mean	0.00	0.06	0.99	1.05
SD	0.92	0.00	0.08	0.17
Max.	1.38	0.07	1.14	1.38
Min.	-1.59	0.06	0.86	0.78

Table 2
Results from the principal component analysis of residuals

			Empirical	Modeled
Total raw variance in observations	=	35.9	100.0%	100.0%
Raw variance explained by measures	=	12.9	35.9%	35.3%
Raw variance explained by persons	=	6.5	18.1%	17.8%
Raw Variance explained by items	=	6.4	17.8%	17.5%
Raw unexplained variance (total)	=	23.0	64.1%	100.0% 64.7%
Unexplained variance in 1st contrast	=	1.5	4.1%	6.4%
Unexplained variance in 2nd contrast	=	1.4	3.9%	6.0%

The reliability of item difficulty measures was relatively high (1.00), and this was probably due to the large sample size used in this study. With regard to construct validity, all items demonstrated an acceptable discrepancy between empirical data and the model expectations, as shown in their infit and outfit MNSQ values. As such, it can be concluded that the threat to construct irrelevant variance is minimised. Table 3 shows inspections of item difficulty measures between items. Overall, it shows that all the gaps between subsequent items are less significant since their sizes are less than 0.5 logits (Linacre, 2006). Table 3 also shows that both genders interpret the items similarly based on the acceptable DIF contrast values of between 0.00 - 0.45 logits.

In terms of test targeting, range of the easiest to the most difficult item is nearly 3.0 logits of general intelligence, which is considered appropriate. Nevertheless, one important factor that needs further discussion is the distribution of item's difficulty and respondents' general intelligence. Figure 1 shows this distribution, where the items are coded Q1-Q23, while respondents are indicated by #. Each # representing 11

respondents and “.” represents a proportion of that 11 respondents. The items at the top of the vertical scale, such as Q1 and Q6, are difficult to score items, whereas corresponding students at the top of the scale indicate respondents with higher intelligence. Going down the line, the items became easier and respondents demonstrated less intelligence. It is evident from the figure that there are no items that target respondents at the upper and lower ends of the scale. The general intelligence of the lower groups of respondents is estimated using statistics for items that are far from the respondents' true general intelligence, such as items Q21, Q22 and Q23. Similarly, the general intelligence of the high ability respondents at the top of the scale is estimated using statistics for items Q1 and Q6, which are far from the respondents' true general intelligence. Since the items are far from the respondents' true general intelligence, the estimation of item difficulty measure is therefore less accurate. The Rasch Model analysis reported that 279 respondents (15.56%) showed infit and outfit MNSQ values of more than 1.4 logits. As such, it provides evidence

Table 3
Item statistics and DIF contrast (in logits)

Item	Measure	Count	SE	Infit MNSQ	Outfit MNSQ	Gap	DIF Contrast
1	1.38	1711	0.07	1.04	1.08	-	-.32
6	1.36	1713	0.07	0.95	1.14	0.02	0.00
5	1.07	1713	0.06	0.97	1.03	0.29	0.08
2	0.96	1713	0.06	0.87	0.78	0.11	-0.21
3	0.96	1713	0.06	0.91	0.89	0.00	-0.12
9	0.87	1713	0.06	0.95	0.88	0.09	0.05
11	0.61	1713	0.06	0.87	0.87	0.26	0.02
7	0.45	1713	0.06	0.99	0.98	0.16	-0.25
4	0.45	1713	0.06	1.00	0.95	0.00	-0.12
12	0.42	1713	0.06	0.9	0.83	0.03	0.01
10	0.24	1713	0.06	0.91	0.88	0.18	0.10
8	0.23	1713	0.06	0.97	1.03	0.01	-0.06
14	0.11	1713	0.06	0.86	0.79	0.13	0.39
16	-0.22	1713	0.06	0.97	1.02	0.33	0.12
20	-0.22	1713	0.06	1.07	1.18	0.00	0.01
19	-0.30	1713	0.06	1.04	1.12	0.08	-0.10
17	-0.58	1713	0.06	1.08	1.14	0.28	-.004
15	-0.77	1713	0.06	1.08	1.15	0.19	-0.10
18	-1.14	1713	0.06	1.02	1.18	0.37	0.10
13	-1.22	1713	0.06	1.14	1.38	0.08	-0.26
22	-1.52	1709	0.06	1.09	1.3	0.30	0.02
23	-1.54	1713	0.06	1.06	1.25	0.02	0.11
21	-1.59	1713	0.06	0.98	1.36	0.05	0.45
Mean	0.00	1712.7	0.06	0.99	1.05		
SD	0.92	0.9	0.00	0.08	0.17		

that the 23-item RAPM is not accurate enough in terms of targeting the students' intelligence estimation. It requires more items for the wide range of intelligence of the respondents.

With regards to the students' general intelligence distribution, of the 30% students who demonstrated high ability ($n = 537$), the group comprised of 239 third year students (44.5%), followed by 214 first year students (39.9%) and the remaining 84 year two (15.6%). In terms of gender,

this higher intelligence group showed a balanced composition of 269 male students (50.1%) and 268 female students (49.9%). Meanwhile, for the 30% ($n = 537$) lower group students, it comprised mainly of the third year students ($n = 380$, 52.1%), followed by the first year students ($n = 178$, 33.1%) and the second year students ($n = 79$, 14.8%). In terms of gender, this low intelligence group was largely made by male students ($n = 329$, 61.3%) compared to 208 female students (38.7%). Surprisingly,

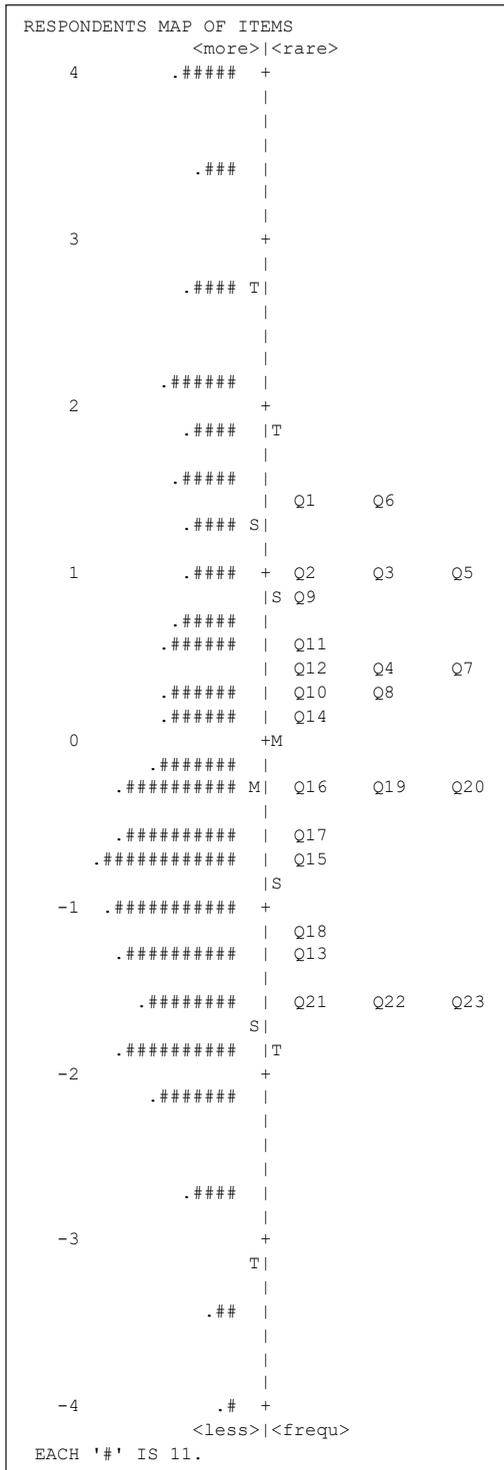


Figure 1. Item difficulty and respondents' general intelligence

the low ability group of students showed slightly higher academic performance, measured by the Cumulative Grade Point Average (CGPA), of 3.12 compared to the group of high intelligence students (CGPA = 2.98). This finding should require a deeper study especially in understanding the relationship between general intelligence and academic performance.

DISCUSSION

The objective of this study is to evaluate the psychometric properties of the RAPM, which is intended to measure general intelligence of test takers. In order to meet the purpose, this study investigated five criteria from the Rasch Measurement Model framework, namely, model assumptions, reliability, construct validity evidence, DIF, and test targeting. Results of the fit statistics and PCA of residuals showed that both of the assumptions were met; therefore, the measurement of general intelligence by the RAPM shows equal-interval properties. As expected, reliability for the item difficulty measure is high (1.00) since the present study employs large sample size of 1793 youth across the country. Thus, there is highly likely that the item difficulty measure is reproducible. That is, the first item (item Q1) will always be the most difficult for the test takers. In fact, the first 7 items are among the most difficult items in the RAPM. This, however, raises the questions of how appropriate the ordering of the RAPM is, since it is reasonable for test items to be arranged from the easiest to the hardest so that the test takers are comfortable with

the test items and thus reduce test anxiety. In his study, Chen (2012) demonstrated that item ordering had moderating effect on relationship between test anxiety and test performance. Also, further study can be conducted to understand the mental image of the test takers, that is, how their mind work when the encounter with RAPM items. This is important in understanding what makes item Q1 the most difficult compared to other items, and what kind of mental operations that is needed to solve this very difficult item.

This study reports high item reliability of the RAPM. This positive result can be related to the large sample size used and wide coverage of item difficulty. Thus, it can be said that the difficulty of RAPM items are highly reproducible for a comparable group of test takers. That is, if the RAPM is administered to other sample of polytechnic students, there is high probability that the ordering of the items remain the same. It should be noted that high reliability of the RAMP items was also reported by the study of Nurhudaya et al., (2019) in Indonesia. Meanwhile, the positive results are also reported for construct validity evidence of the RAPM since there is a very minimum evidence of construct-irrelevant variance and construct under-representative. The high evidence of construct validity of the RAPM enables test users to interpret results from the measurement appropriately since the instrument is measuring general intelligence and not other unintended construct. However, the result is not unexpected as the RAPM has shown evidence of high

construct validity in many studies across many cultures (Brouwers et al., 2009; Kpolovie & Emekene, 2016; Rushton et al., 2004).

In this study, there is also evidence that the RAPM did not really target the respondents, especially at the lower and upper parts of the general intelligence scale continuum. Hence, we argue that there is a need for more items to target this group of respondents. For this, we recommend the original 36-item version when the instrument is administered to Malaysian youth so that more items can function together to estimate the respondents' intelligence.

CONCLUSION

Its limitation notwithstanding, the present study extends the understanding of Rasch Model analysis in assessing psychometric properties of the RAPM. Practically, the DIF and test targeting analysis employed in this study provide a more stringent assessment of psychometric properties which are not offered by CTT analysis such as confirmatory analysis. Nevertheless, in order to better understand the RAPM items, investigations should go beyond psychometric issues. Researchers need perform more qualitative works in order to understand what makes an item more difficult than other item, thus requiring higher general intelligence ability to solve.

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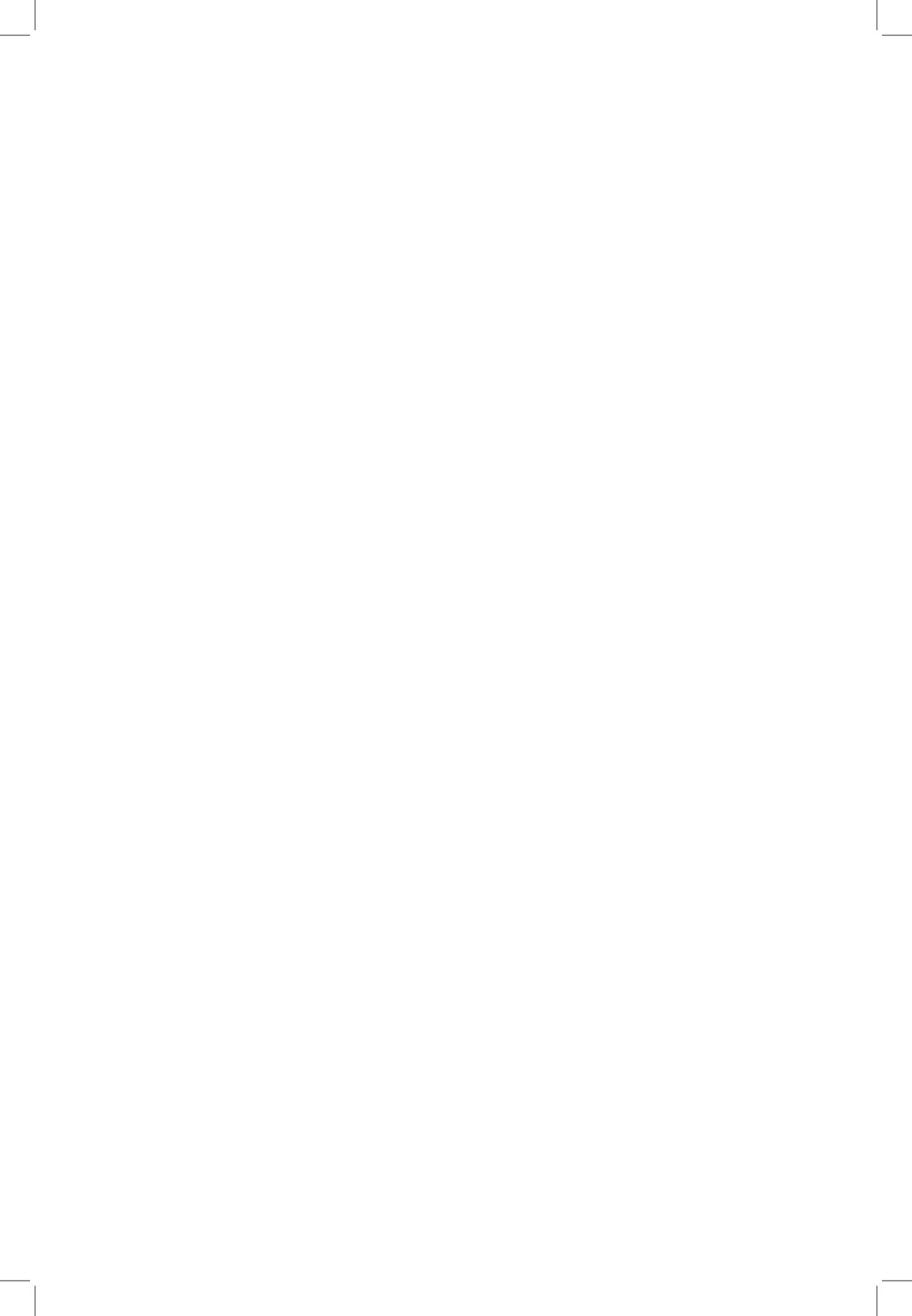
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***Teungku* from Different Worlds in Aceh: An Analysis of the Trajectory of Their Hybrid Identity Construction**

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ABSTRACT

The emergence of *teungku*, another term of *ulamâ* (Islamic scholars) in Aceh, from different worlds (e.g., lecturers of natural sciences) has been a growing phenomenon in recent years, which affects their academic identity. However, research on this issue has been scant. This study attempted to fill in the gap by examining the trajectory of the academics' hybrid identity reconstruction. Drawing upon social learning theory, this study purposively selected two academic-*teungku* for in-depth interviews. Narrative inquiry was employed as it best captures their detailed life stories or experiences. The results show that the factors behind their identity reconstruction are more or less similar, including their awareness of the individual Muslim obligation to do *dakwah*, their good ability and experiences of reading the Quran publicly, their past religious activities during their study in Western countries, and their commitment to improving their ability to be able to participate in the community of practice of *teungku* world. In conclusion, their identities have been revised, refined, and renegotiated to align with the academic needs and their religious obligation.

Keywords: Academics, Aceh, different worlds, identity reconstruction, Islam, *teungku*

INTRODUCTION

Identity reconstruction, revision, strengthening, and renegotiation occur in many contexts. In Aceh, an Indonesian province in the northern tip of Sumatra

Island, several academics teaching non-religious disciplines in many universities have reconstructed their identities into *teungku*. At the same time, they keep their existing professional identity as academics who teach at a university. Consequently, they now hold hybrid professional identities, *teungku-academics*.

Teungku is a unique social and professional identity in Aceh province. The identity commonly belongs to local

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Islamic scholars who have graduated from a *dayah* (a traditional Islamic boarding school). Called *teungku*, they are believed having a high knowledge of Islam and abilities to serve people with several Islamic religious rituals. Their roles range from being a *dai* (preacher) or *khatib* who gives a sermon before Friday afternoon prayer, leader (*imam*) of five-time-a-day prayers, to the reciters of the Quran in several community rituals. They are endorsed to do so because of their religious competencies after completing their study in *dayah*. Differently, the academics come into the university world and continuously construct and reconstruct their identities.

Understanding an individual's identity and identity development is crucial for several reasons. Firstly, identity influences what one does (Crow & Møller, 2017). Secondly, it can help shape our beliefs and aspirations (Morrison, 2013). Identity also provides "directions, aspirations, and images of oneself that guide the shaping of the trajectory going forward" (Wenger, 2010). Especially for teachers, thirdly, it can help them "construct the nature of their work on a daily basis (motivation, satisfaction, and competence)" (Bolívar et al., 2014). Through understanding their narrative as teachers, for instance, they know how suitably they dwell where they already are (Aoki, 1992; as cited in Phelan, 2000). Fourthly, as Wrench (2017) concluded, personal narratives can be used as resources for understanding one's experiences and the process of becoming a certain kind of person. Concerning this,

Connelly and Clandinin (1999) stated that by understanding our lived story, the connection between what we believed and how we practiced it could be strengthened.

In researching the change of identities in a variety of disciplines, a narrative approach has commonly been used (e.g., Alsup, 2006; Connelly & Clandinin, 1999; Farnsworth, 2010; Kelchtermans, 2005; Nelson, 1993; Nghia & Tai, 2017; Søreide, 2006; Watson, 2006). Using a narrative approach, they found that identity was not static; it was changeable and involved a trajectory. They also found that people have multiple identities in their lives.

Despite the abundance of the studies on identity, there has been less attention to the trajectory of *teungku* identity that transforms from their different worlds, such as from non-religious or secular departments, in the Aceh context. Researching the emergence of *teungku* identities through narrative inquiry can bring to the fore a multitude of complex life stories, including their influential factors, that motivate them to negotiate and renegotiate their identities. According to Sfard and Prusak (2005), through understanding the past experiences, we can make sense of the present.

This research was carried out to fill in the gap by exploring the reconstruction of the secular academics to *teungku*, and grasping the processes associated with the development of them. Specifically, this study focused on the identity reconstruction of the academics-*teungku* through the ways they talk about themselves and their work. As Goodson (1992) claimed that listening

to teachers talk/talking about their work should be all the proof scholars needed to understand that the autobiographical was of utmost importance to teachers even when discussing policy and practice. For this purpose of the study, several questions were addressed, including:

1. Why do they reconstruct their identities?
2. How do they negotiate their identities of being a *teungku*?

LITERATURE REVIEW

Identity

Despite considerable research studies on identity, the concept of identity is still used with such a variety of meanings over the last century (Day et al., 2006). Some characterize personal, some social, and some professional identities. This supports the divide of identity into three types, including personal identity, social identity and professional identity (Burke & Stets, 2009), even though criticism on the divide exists. Thoits and Virshup (1997), for instance, viewed the distinction of identity was misleading as the three interact with one another.

According to several theorists (e.g., Gee, 2010; Wenger, 1998, 2010), identity can be generally defined as how we feel about ourselves and how we are recognized by other people. However, Crow and Moller (2017) reminded that "Identities are not simply who we say we are, but reflect the motivation, drive, and energy connected to our actual practices". In this regard, Beijaard

(1995) stated that identity was "the various meanings someone can attach to oneself or the meanings attributed to oneself by others". In terms of professional identity, Adams et al. (2006) defined it as our sense or perceptions about our professional capacity, responsibilities, and relationships. Other scholars, Scribner and Crow (2012) defined professional identities as "identities which individuals use to make sense of and enact (their) roles".

However, it has been reminded that roles are different from identity even though roles determine one's identity. With respect to this, Wenger (1998) contended that roles could be designed, but not the identities; it is through the roles identities are manifest. In a different way, Ryan (2007) stated that "roles are scripted, deterministic, and static, while identities are improvisational, stress human agency, and are dynamic" (p. 345). Hence, two academics may have similar roles but have different identities.

Furthermore, Gee (2010) argued that identity was not single, but multiple, hybrid and conflicting. One may have more than one identity at the same time. This is in line with Ryan's (2007) argument that an individual may "take on different and sometimes contradictory identities in different social contexts". For instance, a Malayan in terms of ethnicity may be professionally a teacher who is a constructivist active learning implementer and personally self-sufficient. Moreover, a teacher may be a constructivist or a behaviorist or both as she or he may mix the ways of teaching at the same time.

Literature also underlines that the sense of identity matters for everyone, especially professionals. For instance, teachers' sense of their identity can motivate them to invest their efforts, shape their beliefs and influence their future actions (Kelchtermans, 2005; Morrison, 2013). Moreover, identity is a key influencing factor in teachers' sense of purpose, self-efficacy, motivation, commitment, job satisfaction, and effectiveness (Day et al., 2006).

However, identity is a never ended process. It is ongoing and dynamic (Bauman, 2004; Beijaard et al., 2004; Giddens, 1991) and constructed through interactions (Mead, 1934; as cited in Canrinus et al., 2011). It is influenced by our past and present experiences (Josselson, 1996; Sugrue, 2005; Wenger, 2010) and 'socialisation' (Adams et al., 2006). Sugrue (2005) argued that our habit and routines were prone to change due to the influence of external factors, which suggested that identity involved contexts. Identity is socially negotiated (Gee, 2001). Gee's (2001) view suggests that negotiation with others and being recognized by others are essential parts of identity formation, which means that one's identity cannot be simply chosen.

Another important thing discussed in the literature is the philosophical controversy between the two philosophers about one's identity formation. According to Crow and Møller (2017), philosopher Hegel (1977) contended that identities did not develop in isolation, but were influenced by where we lived, worked, and played in cultural

and historical contexts. On the contrary, philosopher Kant (1966) argued that one's identity could be chosen by an individual. Lave and Wenger are among the scholars who seem to agree with Hegel's perspective as they argue that identity construction is culturally influenced and our engagement in communities of practice reshapes our identities.

Characteristics of Identity

In Wenger's (1998, 2010) theory, a person's identity is described to have three characteristics, including a trajectory, a nexus of multiple memberships, and multiscality. Firstly, by trajectory, Wenger (2010) meant that identity "incorporates the past and the future into the experience of the present", "accumulates memories, competencies, key formative events, stories, and relationships to people and places", and "provides directions, aspirations, and images of oneself that guide the shaping of the trajectory going forward". He also emphasized that trajectory was a "continuous motion" of our experiences, not a predicted track to be followed. This aligns with Morrison's (2013) argument that the trajectory of identity formation is complex. Secondly, one's identity is a nexus of multi-memberships, as an individual has been involved in a variety of communities of practice. Thirdly, identity is shaped at multiple levels all at once. A teacher, for instance, can identify the teachers at various levels, ranging from school, district, to world levels.

Moreover, Wenger (2010) argued that learning plays an important role in shaping one's identity. Learning is not an individual but a social process, which is arranged in cultural and historical settings (Lave & Wenger, 1991; as cited in Farnsworth et al., 2016). Learning is achieved when an individual participates in the practices of social communities through which his/her identity is constructed (Wenger et al., 2002). That is why Wenger et al. (2002) introduced the construct of a community of practice into his identity theory, by which he meant "a group of individuals participating in communal activity, and experiencing/continuously creating their shared identity through engaging in and contributing to the practices of their communities." He argued that we not only acquire skills and information through learning but also become certain persons (identity). Learning is regarded as "a journey through landscapes of practices" (Wenger, 2010).

Furthermore, Wenger (2010) argued that one's involvement in a community of practice might be accepted or rejected, which had an impact on one's identity development. It was found that the identity of marginality would be developed by members if their practices and experiences were considered not relevant in a community (Wenger, 2010). Differently, Wenger also found that a central identity would be developed by those whose practice received acceptance in a community and whose experiences were valued.

Wenger (1998, 2010) also stated that identity development involved identification

and negotiation. Identification can be done through three modes, including engagement, imagination, and alignment. Engagement in a certain practice is very crucial in the process of learning because it gains "a lived sense of who we are" (Wenger, 1998). Besides, it is also important to have imagination, which means that an individual creates images of the world. One needs to imagine him/herself when being part of the community. Wenger (1998) stated, "We use such images of the world to locate and orient ourselves, to see ourselves from a different perspective, to reflect on our situation, and to explore new possibilities". The last mode of identification is alignment, meaning an individual attempts to align what is practiced in the larger community of practice so as to become part of the community (Wenger, 1998).

Identity (Re)construction

Identity construction and reconstruction have been increasingly researched in various and with various approaches and theories. Torres et al. (2009) found all theories on identity development had some similar themes. Among them are identity development moving from simple to complex, socially constructed and reconstructed identities, and contextually influenced identities.

Nghia and Tai (2017) researched the teacher identity formation of student teachers when they did teaching practicum at school. It was found that their teacher identity had been shaped prior to studying in teacher education and was continually shaped during their study at university

and defied when they dealt with realities at schools during their practicum. This suggests that identity and professional identity be not static; it always changes.

Morrison (2013) in his longitudinal research on the trajectories of identity formation of fourteen early career teachers found three trajectories, including emergent, tenuous, and distressed. Eight of them showed emergent teacher identity, as they felt hope and promise within themselves. They were also optimistic about their future career and felt suitability for the job. Differently, one of them showed distressed identity as she was unable to cope with the tensions in her job. Finally, she left her teaching job. Another teacher exhibited tenuous teacher identity due to the complex tasks she dealt with daily.

To some extent, all the research findings suggest that identity construction is a complex process. It has multi-facets and involves a social process and is influenced by social contexts.

METHODS

This study is by nature qualitative. Narrative inquiry was employed so as to be able to illuminate details life stories of the two academics. Narrative inquiry, according to Clandinin and Connelly (2000; as cited in Creswell, 2009), refers to “a strategy of inquiry in which the researcher studies the lives of individuals and asks one or more individuals to provide stories about their lives”. It is a vital methodology in researching “human being” and “becoming”

(Zimmerman & Kim, 2017). Hence, narrative inquiry is relevant to use in illuminating the lived stories of academics.

In this study, two academics who have long engaged and done their service in various religious activities and been called *teungku* were involved after having their consent. They were interviewed separately at their convenience. The interviews were carried out to understand their lived stories in reconstructing their identities and the ways they negotiate their identities. To do so, a collaboration with them was made as a way to understand and inquire into their experiences (Clandinin & Huber, 2010). The interviews began with less structured questions beginning with the change in the participants’ lives. The questions were oriented to three commonplaces of narrative inquiry, including temporality, sociality, and place (Clandinin & Huber, 2010). Drawing on their own life stories, the participants make sense of their lives and themselves. Their identities are theorized in the process of telling and retelling of their stories.

Their stories were transcribed and given back to them for checking and rechecking and ensuring that the aspects of their lived experiences’ representation. The data was then analyzed by using the identity approach, focusing on “how people construct themselves within institutional, cultural, and discursive contexts” (Clandinin & Huber, 2010). The data was then interpreted by using narrative chronology by relating the significant events in their stories based on the time order they occur (Fraser, 2004).

RESULTS

In-depth interviews were carried out with the two academic-*teungku* (pseudonyms are used throughout this study) briefly depicted in Table 1.

Table 1
The two academic-teungku respondents

No	Academics Names	Education	Work Experiences	Job	Disciplines
1	Buh, Ph.D	MA from the US and Ph.D. from Australia	27 years	English language teacher educator	Linguistics
2	Dr. Ham	Doctoral degree from Germany	20 years	Engineering educator	Engineering

Tgk Buh, Ph.D.: Using Islamic Text in Learning English

Pak Buh is an English lecturer at a public university in Aceh, Indonesia. He narrated that his early education started at an Islamic primary school (MI), secondary (SMP) and senior high schools (SMA) in Aceh in which he took several Islamic religious subjects as well as secular subjects. As well, he has a good ability to read the Quran as he had learned from local *teungku*. Besides, he used to take part in several competitions of reciting the Quran, locally called *Musabaqah Tilawatil Quran* (MTQ). He often won the competitions at several levels, ranging from village level, sub-district level, to district level. However, he never won the MTQ at the provincial level. As such, he could not proceed to a higher level of competition, such as national, regional and international levels. Yet, his failure to win MTQ at a provincial level did not make him discouraged from learning the Quran because winning the MTQ was not

The narrative data was analyzed and is presented below by initially addressing the narrative of each academic-*teungku* in turn.

his main focus at that time; he focused more on studying at school.

Upon completing his senior high school, he continued his study to a public university to undertake a bachelor program majoring in English for education and teacher training. He chose that department because he aspired to be an English teacher. While studying at university, he sometimes took part in several competitions of reciting the Quran. He was also frequently invited to read the Quran in opening or closing social activities on his campus.

Having completed his undergraduate program, he served as an English teaching assistant at his university and the language development center. Then he received a Fulbright scholarship to study in the United States of America, majoring in linguistics. During his study in the US, he felt that the Muslim community on his campus and in the community where he lived had a lack of Islamic religious resource persons that served as *khatib* or preacher to deliver

an obligatory sermon as an integral part of Jumah Prayer in the mosque. He then attempted to serve as a *khatib* on Friday prayer at a mosque. He successfully made in his debut as he had public speaking skills, good Quran reciting, and existing basic knowledge on Islamic. Since then, he was requested to do that again and again. The opportunities to practice it significantly made him more confident to do Islamic sermon publicly.

He did similar things when he took a Ph.D. program in linguistics in Australia, which made him recognized among the Indonesian Muslim society as a well-capable person in Islamic religious sermon. He also participated in fundraising for building an Indonesian mosque for the Indonesian Muslim society in Melbourne. He was also invited to do religious speech following prayers during his whole life in Australia.

Back to Aceh after having completed his doctoral program, Tgk Dr. Buh returned to his work at university as a tenured English lecturer. Since then, he had also been frequently invited to be a *khatib* for Jumah prayers in several mosques and as a *dai* in Banda Aceh municipality and Aceh Besar district. He felt that being a *dai* was an individual obligation of Muslim, besides doing his main job as an English teacher educator. He frequently wore several attributes or markers of *dai*, such as wearing *peci* (Muslim hat) almost the whole day, and *gamis* dress when joining Islamic rituals in the society. Because of his active participation in such activities, he is currently called Tgk Dr. He has frequently been invited to a jury for MTQ at many

levels in Aceh. Hence, he currently has multiple social identities, such as an English lecturer and *teungku*.

More importantly, Pak Buh also often used Islamic related teaching materials in teaching English to his EFL students at university. He believed that in that way he could make his students gradually familiar with English vocabularies related to Islamic religious terms and more attached to Islamic knowledge and practices. In that way, he expected that they would be able to speak about Islam in English and at the same time improved their understanding of Islam.

To improve his confidence in participating further in such social and religious activities in his society, he continued investing in learning Islamic knowledge and the Arabic language. He believed that these have been barriers to participating fully in Islamic religious activities and understanding the books written in the Arabic language.

Tgk Dr. Ham: Using Sciences in Preaching Islam

Dr. Ham is currently a lecturer of natural sciences in a public university in Aceh and voluntarily works as *imam* (prayer leader) of a local mosque. His participation in Islamic activities is inseparable from his childhood experiences. When he was a child, his father, who had good knowledge of Arabic and the Quran and worked as a math teacher, taught him to read the Quran in the correct manner and explained its contents. While studying at primary through senior high schools, he often participated in MTQ.

As he was able to read the Quran, he was also employed while studying at university. He was also frequently invited to read the Quran in an opening or closing of locally held social activities. Besides, he worked as a radio anchor and tutor at a private course that prepared prospective students to enter a university. He also served as a master of ceremony (MC) in various social activities.

During his Ph.D. study in Germany majoring in the natural sciences, he was often visited by non-Muslim missionaries to spread their religion to him. However, he did not convert into their religion because of his good knowledge and strongly ingrained beliefs in Islam. This challenged and encouraged him to improve his existing knowledge of Islam and to become a novice preacher of Islam religion in his Muslim community in Germany. He wanted to strengthen the Islamic knowledge and religious beliefs of his community members, especially students and other Indonesian Islamic communities living in the western country.

Once he had completed his Ph.D. program, he returned to Aceh and chose to devote his time to engaging in Islamic religious activities. His confidence as a novice Islamic preacher then grew gradually. He has dedicated his time to be a volunteer member of a mosque while doing his daily routine as a lecturer of natural science at a public university. He has frequently been invited to serve as a *khatib* or preacher of Jumah prayer and during Ramadhan month, indicating that he had been accepted to do the roles in his society. When the interview

was done, he stated that he has been fully booked for the whole year for delivering preaches in mosques in Aceh.

He had enjoyed being an Islamic preacher and had a commitment to do so while being a lecturer of natural sciences at university for several reasons. Firstly, he could use scientific findings and theories in explaining Islam. He stated that Islam and natural sciences could be mutually supportive because natural science provided proofs and theories to explain further about the verses of the Quran and prophetic traditions (*hadits*). He stated that because of his combination of Islam religion and sciences in his speech, his preaching became interesting. And he had frequently received invitations to do sermons in both regular and one-off daily social activities. Secondly, he felt that learning and engaging in religious activities were obligatory for him even though he was not a graduate of Islamic traditional boarding schools, like *dayah* or *pesantren*.

However, he felt that his involvement in religious activities was hampered by his lack of ability in the Arabic language. To anticipate this, he had invested his time and effort in learning the Arabic language by himself through any printed and online learning resources and communication with the community members of Islamic preachers. Besides, he was sometimes criticized for not wearing *teungku*'s clothes in his daily life. He preferred wearing casual clothes as he reasoned that Islam necessitated every Muslim to wear clothes that cover one's body, especially the *awrah*

parts. He also argued that our understanding of Islam and the degree of our submission to Allah were not determined by our clothes.

DISCUSSION

The narratives from both Tgk Buh, Ph.D., and Tgk Dr. Ham are discussed by drawing upon Wenger's (1998) identity development theory through participation in a community of practice, as also adopted by many researchers (e.g., Nghia & Tai, 2017).

Identification Process

Wenger (2010) viewed that the identification process involved engagement, imagination, and alignment. The identity of both of the non-religious discipline lecturer-*teungku* had developed since their early childhood. However, the process they experienced was different from one another. Dr. Ham's hybrid identities of academic-*teungku* were initially constructed through his intensive interactions with his father as a religious person with high competence in the Arabic language and the Quran, his participation in the community of practice of MTQ, and his experiences during his studying at several universities in Indonesia and abroad. A little bit different in his hybrid identity formation Dr. Buh experienced during his participation in MTQ and his study at teacher education and overseas. Put differently, both of them used their existing competencies of reading the Quran and public speaking as the important requirements to enter into the new professional identity as a *teungku*.

Both of their identities were also shaped by the imaginations. Their imagined identities

make them construct and reconstruct their identities. For instance, during their childhood, they imagined being able to read the holy Quran professionally and win the Quran reading competitions at many levels. Later on, especially during their study abroad, however, their imaginations were challenged and reconstructed to be *dai* or Muslim preachers. Both their exiting ability to read the Quran and their confidence to speak publicly are highly supportive. Their imaginations to be more professional *dai* motivate them to learn more and further about Islam, the Arabic language, and the Quran.

Both Dr. Ham and Dr. Buh had attempted to align their practices, such as by continually learning the Quran and Arabic language and participating in the activities of the community. This is called legitimate peripheral participation (Lave & Wenger, 1991), which refers to "learning by immersion in the new community and absorbing its modes of action and meaning as a part of the process of becoming a community member" (Crawford & L'Hoiry, 2017). Hence, they need to master knowledge in order to move towards full participation in the community. However, Dr. Ham was not willing to align with the way the members of the community practiced value and saw clothes. He kept wearing casual dresses as he believed that knowledge and submission to God were not on the dress. Nevertheless, he always wore dresses that fulfill the requirements in the Islamic dress code, which was to cover *awrah*, which was commonly defined as the parts of the body that must be kept covered.

Negotiation Process

According to Wenger (1998), the process of identity formation also includes the negotiation of meanings, or practices, which determines the extent to which we can contribute to and shape the practices that we invest in. In terms of the negotiation process, Dr. Buh and Dr. Ham's participation in studying the non-religious disciplines of study and religious-related Indonesian community activities overseas had provided them opportunities to negotiate their practice of the teaching and preaching contents. While Dr. Buh had negotiated his teaching contents, such as by relating them to Islamic religious worship practices, Dr. Ham had done so by incorporating the contents of the natural science into two main Islamic sources, such as the Quran and hadiths. Both of them had different arguments regarding the reasons behind the combinations. Dr. Ham argued that the integration of natural sciences contents to his speeches made it more interesting, more logical and scientific, and received high attention from the educated audience. Differently, Dr. Buh argued that the integration of Islamic religious contents into his English teaching made his students better understand religious knowledge and practices. In other words, while Dr. Buh had challenged the existing practices of teaching English in his community of practice, Dr. Ham had challenged the commonly practiced Islamic religious speeches.

CONCLUSIONS

From the findings, several conclusions can be made in understanding the trajectory of the hybrid identity reconstruction of the two universities lecturer-*teungku*. Firstly, they have reconstructed their identity to meet the individual obligation of Muslims to do *dakwah*, regardless of their discipline respectively. Secondly, they have enjoyed joining the *teungku* world as their practices have got good acceptance in the community. Thirdly, the community acceptance has encouraged them to strive to move from peripheral participation to center, such as by learning further about the things necessary in the process of alignment with the practice in the community. Fourthly, their intensive interaction and engagement in the community of practice also contribute to the hybrid identity reconstruction. Overall, the trajectory of identity reconstruction of the academic-*teungku* in the Muslim world confirms Wenger's (1998) social learning theory.

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Productive Connective Thinking Scheme in Mathematical Problem Solving

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ABSTRACT

The need to make connections in doing problem-solving has been the focus of many researchers. The purpose of this study was to describe the formation of productive connective thinking schemes when students do complete the phases of mathematical problem-solving. Schemes are formed through the phases of cognition, inference, formulation, and reconstruction. This qualitative study adopted several modes of data collection to triangulate data to ensure the validity of the findings. Twenty four research participants were selected among high performing Grade 12 students of three Indonesian Secondary Schools using the purposive sampling method. Productive thinking schemes were identified based on the analysis of the participants' written assignment, think-aloud recordings and interview transcriptions. Description of the schemes was concluded from the understanding of the causes of the problems and the way the participants make associations between ideas. Students' thinking structure is aligned with the structure of the given problem. In solving the problem, participants formed constructive thinking schemes which were generalization schemes that require high spatial and abstraction abilities. This allows reconstruction of the connective thinking network scheme that forms a new connective scheme that can be used for more complex problem-solving.

Keywords: Connective thinking schemes, mathematical problem solving, schemes, thinking

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INTRODUCTION

Various research has been carried out by researchers to improve the ability to solve the mathematical problem (Intaroset al., 2014; Kapur, 2010; Krawec, 2014; Rosli et al., 2013; Schoenfeld, 2013, 2016). However, student learning outcomes on mathematical problem solving are still

below the average standard, as shown by the PISA 2015 research data on mathematical literacy skills of students from 72 countries (Organisation for Economic Co-operation and Development [OECD], 2017).

Mathematical problem solving requires students to think mathematically which involves the use of mathematical concepts, procedures, facts and principles (OECD, 2017; Saad & Ghani, 2008). Additionally, students must have the ability to describe, explain and predict phenomena (Intaros et al., 2014). Research findings on students' success in solving mathematical problems show that students must have high creativity, metacognitive skills, analogy skills, ability to connect among concepts, other sciences, and everyday life, and ability to use manipulation strategies (Eli et al., 2013; Knox, 2017; Krawec, 2014; Matejko & Ansari, 2015; Schoenfeld, 2016; Susanti et al., 2013; Turmudi & Susanti, 2018).

National Council of Teachers of Mathematics (NCTM) posited that there was a relationship between mathematical problem-solving and mathematical connections (NCTM, 2015). This was also emphasized by Mhlolo et al. (2012) who stated that students' ability to connect between mathematical concepts was an important factor in aiding students to solve mathematical problems. According to Faidah and Susanti (2017) as well as Tasni et al. (2017), at this stage, these students have already acquired productive thinking skills. Furthermore, students who have this

ability have a tendency to construct their ideas in connecting mathematical concepts and then generalizing it to more complex mathematical problems (Fuchs et al., 2004).

Research on thinking ability is profoundly rooted in cognitive theory, proportional thinking, analogical thinking, reflective thinking, creative thinking, critical thinking (Aloqaili, 2012; Dubinsky, 2002; Jitendra et al., 2011; Oxman, 2017). However, none of the studies had focused on the flow of thoughts of students during the problem-solving process. In cognitive theory, the scheme of thinking is related to the description of the arrangement and sequence of ideas built by someone in the structure of their thought (Chalmers, 2003; Schmidt, 2003).

Based on this background, the researchers were interested to examine how students who are high performers in mathematics build the network formation scheme to enable them to construct concepts and productively connect concepts in solving mathematical problem-solving. The purpose of this study was to describe the formation of productive connective thinking schemes when these students undergo the phases of mathematical problem-solving. Representation is one way for students to build ideas when connecting mathematical concepts. Thus, students' cognitive activity in establishing mathematical connections in solving mathematical problems was explored by analyzing the representations made by the students.

MATERIALS AND METHODS

Mathematical Connections

Mathematical connections refer to the cognitive process in connecting or associating two or more ideas, concepts, definitions, theorems, procedures, and representations in math, with other disciplines, including real-life (Garcia-Garcia & Dolores-Flores, 2018). In the Principles and Standards for School Mathematics (NCTM, 2000), problem-solving and making connections are stated as part of the five process standards. NCTM (2015) had also highlighted the significant correlation between problem-solving and mathematical connections. In the process of problem-solving, McLeod (2018) explained that the understanding of what information is known and what is asked about the problem becomes the initial factor in understanding the cause of the problem. Furthermore, part of the solution is needed to build ideas in connecting mathematical concepts (Faidah & Susanti, 2017; Susanti, 2015; Turmudi & Susanti, 2018).

In order to understand the causes of mathematical problems, students must first make mathematical connections (Tambychik & Meerah, 2010). They must be able to connect the information given with what the problems want. Problem-solving requires a connection between mathematical concepts, between concepts and other sciences and between concepts and everyday problems. This connection process can be described as a spider network where dots are mathematical concepts and threads that connect between points as connections (Tall & Barnard, 1997). This

spider network describes the cognitive activity which is the relationship between the cause and solution of the problem.

Cognitive activities evolved in the construction of mathematical connections can be analyzed from the process of representation carried out when building reciprocal relationships between mathematical concepts (Eli et al., 2013; Susanti, 2015), may it be concrete or abstract representation. The relationship of concrete representations and abstract representations is that cognitive activities can be represented simultaneously (Uttal et al., 2009).

Productive Connective Thinking

Connective thinking takes place when the learner makes a connection between mathematical ideas. As elaborated by Slavin (2008), the connective thinking process takes place in the working memory, involving the formation of connections between new and old knowledge that have the same and interrelated meaning to form a connective thinking scheme.

In this study, representation becomes a tool to describe the process of thinking of the subject during the process of communicating ideas to build connections. Representation is a model or a substitute form of a problem situation or aspect of a problem situation that is used to find a solution. For example, problems can be represented by objects, images, words, or mathematical symbols (Ellis, 2007; Lesh et al., 1987; Otting et al., 2010; Tall & Barnard, 1997). Hence, mathematical representation communication of mathematical ideas from the thought

process, either using language, diagrams, graphics, symbols, tables, spatial, numerical and verbal, so that they become facts that can convince others. as convincing facts. Students who are able to build connections in solving mathematical problems are regarded as having the tendency to think of productive connections. Thus, the activities in this cognitive process, include (i) the active role of students in building meaningful knowledge, (ii) the importance of making connections between ideas in construction significantly, and (iii) the importance of connecting between ideas and new information.

Cognitive Scheme Formation Theory

According to Toshio (2000), schemes are general units and standards of mental structure used systematically at all times to make decisions or take behavior. Similarly, it is also used by von Glaserfeld and proponents of Constructivism. Through one's cognitive process new knowledge is constructed based on experience (Root et al., 2017) and new knowledge gained will be stored in one's long-term memory in the form of a scheme. The theory of cognitive scheme formation by Toshio (2000) was used to explore ideas in the formation of mathematical connections. Based on Toshio (2000), the phases of forming cognitive scheme are as follows:

- (i) Cognition phase: understanding the problem situation and thinking about the direction of problem-solving;
- (ii) Inference phase: find appropriate information and a reasonable and logical basis for planning problem solving;
- (iii) Formulation phase: verifying problems, deciding to process and discovering new knowledge through mathematical schemes; and
- (iv) Reconstruction phase: looking back, evaluating, reconstructing the entire problem-solving process then generalizing ideas to other domains.

Research Methods

This qualitative descriptive study had adapted several modes of data collection. In ensuring the validity of findings, data needs to be triangulated from several resources. The different source used for data collection was aimed to illustrate the scheme of students' productive connective thinking in building mathematical connections when solving mathematical problems.

The participants of this study were 24 high performing students who were in Grade 12 from three Secondary Schools in East Java Indonesia. High performing students were chosen because they were able to go through all the stages of problem-solving. To select the research participants, 120 students were first given the initial assignment on problems that required making connections between concepts. The written test as an instrument of study covers problem-solving items related to functions, number patterns, sequence patterns, the general formula of the n^{th} term of a sequence of numbers.

The task is in the form of multilevel stupas which are composed of several cube units. Each level forms a number pattern that can be generalized into a general formula. This instrument was validated by three experts mathematics education, pure mathematics, and psychology. Scoring with a scale of 0-100 was imposed on students' answers based on connection indicators and the results are grouped into three categories of high (85-100), moderate (60-84) and low (0-59) student abilities. This was used to determine their abilities. Based on the assessment, 24 students were categorized as high performers, 45 as moderate and 51 as low performers. Hence, the 24 students in the high performing group were chosen as research participants.

The selection of research participants had adopted the purposive sampling method because it is considered as the most effective method for studying certain domain experts who can provide the information needed (Tongco, 2007). The selection of subjects was based on three considerations as follows: (i) The three schools selected represents the city and district; (ii) The participants were able to provide rich source of information on network connection thinking scheme in mathematical problem-solving.; and (iii) 12th grade students were chosen because they already had all the basic concepts related to problem-solving.

Data was collected from the assignment that requires making connections in solving the given problems through the thinking aloud procedures. Their activities were noted and recorded while they were solving

the problems and was later followed by in-depth interviews with the participants who have met the criteria. This allowed the researchers to complete the data obtained from the think-aloud procedures. The data collection was carried out until saturation occurred, which meant that the same data characteristics were obtained. In other words, it was done until no new information evolved from the interviews. Finally, only 12 participants were selected as informants in the triangulation process for data validity. Productive thinking schemes were identified based on the analyses of the participants' written assignments, think-aloud recordings, and interviews. The data obtained in the form of student work from the written tests that describe the thought process. Think aloud and interview strategy reinforces the explanation of what participants think when solving mathematical problems. Data from think-aloud obtained through the pronunciation of something that participants thought related to problems. The results of the data collecting activities are then transcribed and coded. The codification is based on the students' ideas that come up while establishing connections when solving a mathematics problem.

Terms and symbols of the occurrence of connective thinking in solving mathematical problems are coded as Table 1. For example, in a stupa problem situation, students determine the stupa image compiler in the form of a unit cube (I1) and in identifying what was known from the stupa drawings, students' responses determine the location of the cube of each storied drawing (I2).

Table 1
Codification of the connection thinking unit

Term	Coding	Symbol	Term	Coding	Symbol
Problem information	Info p , $p = 1,2,\dots,m$		Solution to problems	S_{mx} , $x = 1,2,\dots,q$	
Ideas that are relevant to the information provided	I_i , $i = 1,2,3,\dots$		Productive connection	K_{pb} , $b = 1,2,\dots,d$	
Relevant ideas with problems given	I_i , $i = 1,2,\dots,n$		Change problems	K_{mr} , $r = 1,2,3,\dots,v$	
Ideas, not relevant to problems	I_{tj} , $j = 1,2,\dots,l$		Symbolic representation	Rep. Sb	
Relevant ideas outside the problem	I_{ls} , $s = 1,2,\dots,t$		Spatial representation	Rep. Sp	
A relevant idea in reaching a solution to a problem	I_{sg} , $g = 1,2,3,\dots,h$		Numeric representation	Rep. Num	
Verbal representation	Rep.verb		Representation of pictures	Rep. Gb	

RESULTS AND DISCUSSION

The discussion on the findings of the research is organized based on the objective of the study, which was to describe the formation of productive connective thinking schemes when these students undergo the phases of mathematical problem-solving. Schema formation as advocated by Toshio (2000) covered four phases, cognition, inference, formulation, and reconstruction. Therefore, analysis of data uncovers students’ thought processes when establishing mathematical connections scheme from ideas relevant to the problem through four phases of schema formation. The written work data and the thought process through think aloud form the basis of the analysis. The thought process is described through thinking schemes in the form of spider webs. Analysis of data was carried out on the results of the triangulation of students who had a tendency to think productively in processing information on

the part of the problem and its solution (Aloqaili, 2012; Jitendra et al., 2011; Oxman, 2017; Xin, 2008).

Cognition Phase

At the cognition phase, students build an understanding of the relationship of problem situations and intend to explore the direction of problem-solving, the information known and the question asked. To understand information about what is known, the participants read the three information provided about the problems. The problem is a non-routine task that requires a connection between concepts and everyday life, in the form of multilevel stupas which are composed of several cube units. the three information in each question is symbolized by a, b and c. Information a is a description of the picture and problem situation, information b is the number of numbers in the pattern to the one from the

known image, and information c is the number of numbers in the second pattern.

The structure of students' thinking forms a network of connections between ideas built on the information provided from previously constructed ideas (Anderson et al., 2014). The network connection of the students' thought processes is explained in the connecting thinking scheme in Figure 1.

In Figure 1, based on the information structure of the problem given, idea I1 appears from information a. Students establish connections (KSP1) between information and ideas I1 to bring up ideas I2 which was done through spatial representations (Rep. Sp1). Connection (KSP2) between idea I2 and information b raised a new idea I3 through image representation (Rep.Gb1). Based on KSP2, students built a relationship between idea I3 and information c through verbal

representation (Rep.Verb1). Connection (KSP3) between idea I3 and information c raises a new idea of idea I4 is explained in Table 2.

Based on the flow of connective thinking related to the cognition phase, the structure of students' thinking according to the structure of the problem given (Baum et al., 2005; Proulx et al., 2005). The thought structure of the students allowed them to recognize the structure of the problem well. Hence, students did not have difficulty understanding the problem situation and thinking about the direction of problem-solving. The idea that emerges based on the representation constructed showed that the structure of students' connective thinking was in line with the structure of the problem (Barrouillet, 2015; Piaget, 1964, 1983). Furthermore, new ideas were built on the connection between the two previous ideas.

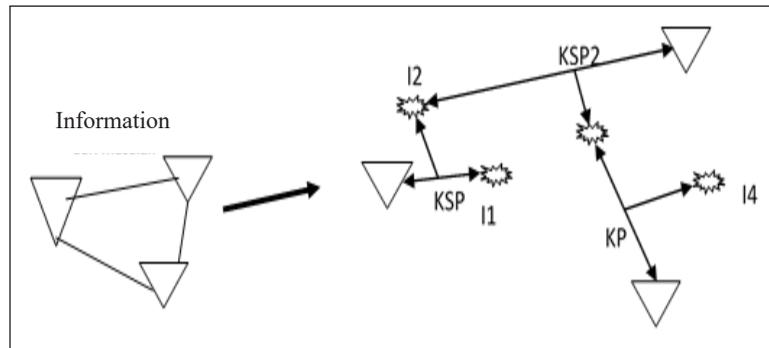


Figure 1. Scheme of productive thinking connection at the cognition phase

Table 2
Connection flow with the representation of cognition phase

Connective Thinking Flow	Aspects of Thinking Cognition Phase
KSP1=a↔I1→I2, KSP2=I2↔b→I3, KSP3=I3↔c→I4	KSP1 (Rep.Sp1), KSP2 (Rep.Gb1), KSP3 (Rep.Verb1).

Inference Phase

In the inference phase in Figure 2, students find suitable information for the solving of problems and make the inference. Students look for the right information and a reasonable and logical basis for planning problem-solving. In building relationships between representations, students drew and made tables as the first step in planning problem-solving. This is done to complement the understanding of the problems that have been formed at the cognition phase (Tasni & Susanti, 2017).

Participants used the development of reasoning, which was formed cognitively to help them carry out the conclusion phase. Based on the description and analysis of the data above, the researchers describe the thinking process of students in the scheme of thought network connection structure as Table 3.

The connection between ideas is built from the relationship between the pieces of information stored in one’s cognition in changing information a, b and c (Courchesne et al., 2011; Solso, 2003). Some relationships

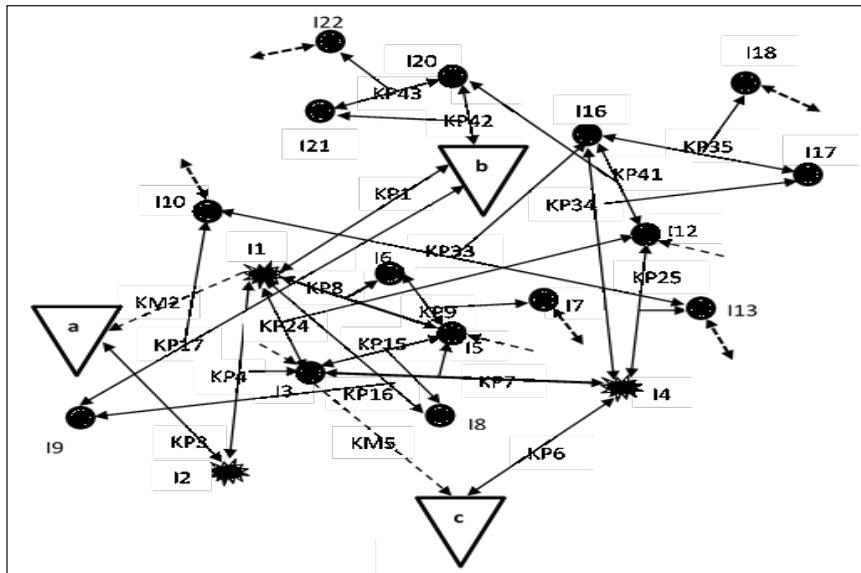


Figure 2. Connected thinking of network scheme at the inference phase

Table 3
Connection flow with the representation of the inference phase

Connective Thinking Flow	Aspects of Thinking Inference Phase
$KP8=I5 \leftrightarrow I1 \rightarrow I6$, $KP9=I6 \leftrightarrow I5 \rightarrow I7$, $KM14=SM1 \leftrightarrow I5$ $KP15=I5 \leftrightarrow I3 \rightarrow I8$, $KP16=I8 \leftrightarrow I1 \rightarrow I9$, $KP17=I9 \leftrightarrow b \rightarrow I10$, $KM23=SM2 \leftrightarrow I3$, $KP24=I3 \leftrightarrow I1 \rightarrow I12$, $KP25=I12 \leftrightarrow I4 \rightarrow I13$, $KM32=SM3 \rightarrow I10$, $KP33=I10 \leftrightarrow I13 \rightarrow I16$, $KP34=I16 \leftrightarrow I4 \rightarrow I7$, $KP35=I16 \leftrightarrow I17 \rightarrow I8$, $KM41=SM3 \leftrightarrow I12$, $KP42=I12 \leftrightarrow I16 \rightarrow I20$, $KP43=I20 \leftrightarrow b \rightarrow I21$, $KP44=I21 \leftrightarrow I20 \rightarrow I22$.	$KP8(Rep.Num1)$, $KP9(Rep.Verb3)$, $KP115(Rep.Sp3)$, $KP116(Rep.Gb3)$, $KP17(Rep.Sp4)$, $KP24(Rep.Sp7)$, $KP25(Rep.Sp8)$, $KP33(Rep.Sp11)$, $KP34(Rep.Sp12)$, $KP35(Rep.Sp13)$, $KP42(Rep.Sp14)$, $KP43(Rep.Sp15)$, $KP44(Rep.Sp16)$.

2005; Root et al., 2017). Explanation in the following Table 4.

Reconstruction Phase

In the previous phase, the structure of students' thinking has been formed according to the structure of the problem given. The network scheme considers the connection structure that is formed by the formulation stage which then formed a complex connection. In the reconstruction

phase in Figure 4, connective thinking networks that have the same relevance and meaning form relationships through numerical representation, spatial images, and algebra. This representation shows that the student recognizes the relationship between procedures to solve problems one to another procedure and can make connections between mathematical concepts and everyday life (NCTM, 2015; Wienert & Helmke, 2008).

Table 4
Connection flow with the representation of the formulation phase

Connective Thinking Flow	Aspects of Thinking Formulation Phase
$KP10=I7 \leftrightarrow I5 \rightarrow I8$, $KP11=I8 \leftrightarrow I7 \rightarrow I9$, $KP18=I10 \leftrightarrow I1 \rightarrow I11$, $KP19=I11 \leftrightarrow I10 \rightarrow IS3$, $KP20=IS3 \leftrightarrow I11 \rightarrow IS4$, $KP26=I13 \leftrightarrow I12 \rightarrow I13$, $KP27=I14 \leftrightarrow I13 \rightarrow I15$, $KP28=I15 \leftrightarrow I14 \rightarrow I15$, $KP29=IS5 \leftrightarrow I14 \rightarrow IS6$, $KP36=I18 \leftrightarrow I17 \rightarrow I19$, $KP37=I19 \leftrightarrow I17 \rightarrow IS7$, $KP38=IS7 \leftrightarrow I19 \rightarrow IS8$, $KP45=I21 \leftrightarrow I22 \rightarrow IS9$, $KP46=IS9 \leftrightarrow I20 \rightarrow I23$, $KP47=I23 \leftrightarrow I22 \rightarrow IS10$	KP10 (Rep.Num2), P11 (Rep.Num3), KP18 (Rep.Sp5), KP19 (Rep.Sp6), KP20 (Rep.Num4), KP26 (Rep.Sp9), KP27 (Rep.Sp10), KP28 (Rep.Num7), KP29 (Rep.Num8), KP36 (Rep.Num9), KP37 (Rep.Num10), KP38 (Rep.Num11), KP45 (Rep.Num13), KP46 (Rep.Sp17), KP47 (Rep.Num14).

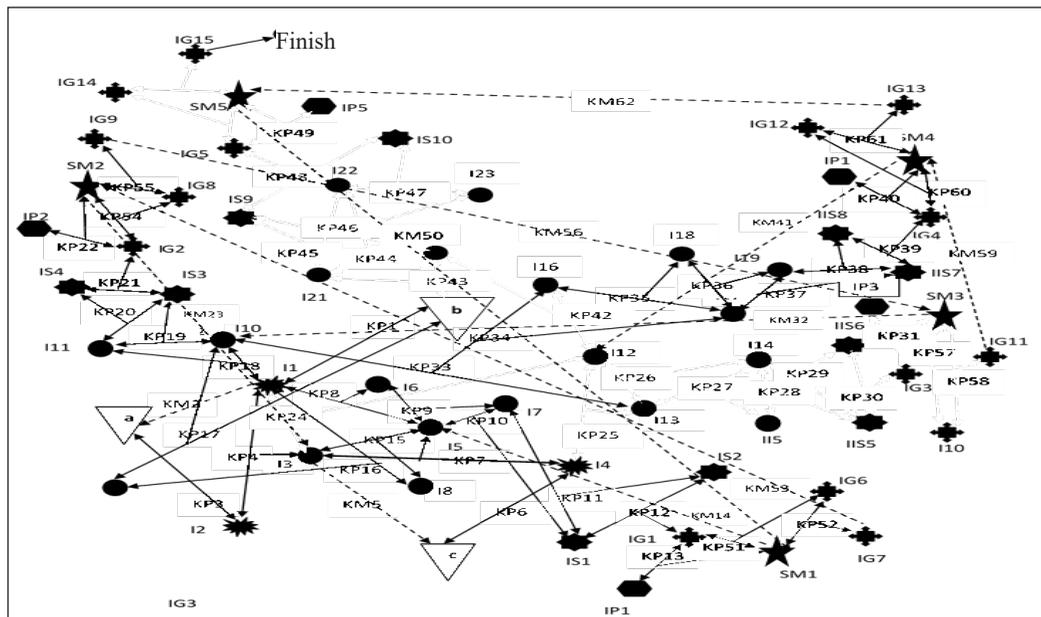


Figure 4. Connected thinking skeptic network scheme at the reconstruction phase

In this process, students get ideas based on their experience so that they can relate understanding and related mathematical concepts (Catrambone & Holyoak, 1989; Dumas & Hummel, 2005; Gick & Holyoak, 1980, 1983). The relationship between ideas is thoroughly reconstructed to form a connective thinking network scheme

(Hurlbert, 1986; Matejko & Ansari, 2015; Mousley, 2004; Pugalee, 2001). Thus, the scheme of connective thinking formed is a knowledge network that forms a hierarchy and is structured. As a result, the scheme of connecting thinking can be generalized to solve more complex questions. Explanation in the following Table 5.

Table 5
Connection flow with the representation of the reconstruction phase

Connective Thinking Flow	Aspects of Thinking Reconstruction Phase
KP12=IS1 \leftrightarrow IS2 \rightarrow IG1,KP13=IG1 \leftrightarrow IP1 \rightarrow SM1,KP21=IS3 \leftrightarrow IS4 \rightarrow IG2,KP22=IG2 \leftrightarrow IP2 \rightarrow SM2,KP30=I14 \leftrightarrow IS5 \rightarrow IG3,KP31=IG3 \leftrightarrow IP3 \rightarrow SM3,KP39=IS7 \leftrightarrow IS8 \rightarrow IG4,KP40=IG4 \leftrightarrow IP4 \rightarrow SM4,KP47=IS9 \leftrightarrow IS10 \rightarrow IG5,KP48=IG5 \leftrightarrow IP2 \rightarrow SM5,KM50=SM5 \leftrightarrow SM1,KP51=SM1 \leftrightarrow IG1 \rightarrow IG6,KP52=IG6 \leftrightarrow SM1 \rightarrow IG7,KM53=IG7 \leftrightarrow SM2,KP54=SM2 \leftrightarrow IG2 \rightarrow IG8,KP55=IG8 \leftrightarrow SM2 \rightarrow IG9,KM56=IG9 \leftrightarrow SM3,KP57=SM3 \leftrightarrow IG3 \rightarrow IG10,KP58=IG10 \leftrightarrow SM3 \rightarrow IG11,KM59=IG11 \leftrightarrow SM4,KP60=SM4 \leftrightarrow IG4 \rightarrow IG12,KP61=IG12 \leftrightarrow SM4 \rightarrow IG13,KM62=IG13 \leftrightarrow SM5,KP63=SM5 \leftrightarrow IG5 \rightarrow IG14,KP64=IG14 \leftrightarrow SM5 \rightarrow IG15.	KP12(Rep.Num5), KP13(Rep.Alj1), KP21(Rep.Num6), KP22(Alj2), KP30(Rep.Num), KP31(Rep.Alj3), KP39(Rep.Num12), KP40(Rep.Alj4), KP47(Rep.Num15), KP48(Rep.Alj5), KP51(Rep.Num16), KP52(Rep. Num17), KP54(Rep.Num18), KP55(Rep.Num19), KP57(Rep. Num20), KP58(Rep.Num21), KP60(Rep.Num22), KP61(Rep. Num23), KP63(Rep.Num24)..

CONCLUSION

In summary, the results showed a description of the formation of productive connective thinking schemes when these students undergo the phases of mathematical problem-solving in four phases schema formation connective thinking seen in mathematical problem-solving processes.

- (i) Phase of Cognition, shows the relationship between the immediate problem and the intention to explore the direction of problem-solving. The structure of students' thinking is in line with the structure of the problem given. Ideas that emerge

on the stage of understanding the causes of interrelated problems build new and varied ideas.

- (ii) Phase of Inference, find suitable information and basis for the solving and make the inference be reasonable and logical. Ideas are formed based on information, new ideas, solution ideas, generalization ideas, and experience-based ideas. The ideas that have the same relevance and meaning build a strong network of connective thinking.

- (iii) Phase of Formulation, verify the problem and acquire the knowledge and schema. The scheme of connective thinking that is formed is a generalization scheme that is equipped with high spatial abilities and abstraction capabilities.
- (iv) Phase of Reconstruction, look back, evaluate, and reconstruct the whole process of problem-solving, and create the new problem. Reconstruction of the scheme of connective thought networks has been formed into a new scheme of connective thinking, then the scheme connects thinking in the domain of more complex problem solving

Implications

Students' thought structure is found to bring up ideas when building mathematical connections. Ideas that can fill the construction gaps practically can be used by the teacher as an indicator to develop learning strategies for students who have the same tendency in thinking. The teacher should help their students solves the problems with various ways of thinking from mathematical problem solving as connections. Theoretically, the findings of this study are expected to contribute to the development of the theory of connection thinking in mathematics learning based on problems solving.

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Examining the Factor Structure of the Teachers' Sense of Efficacy Scale with Malaysian Samples of In-service and Pre-service Teachers

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ABSTRACT

This study examined the factor structure of the Teachers' Sense of Efficacy Scale (TSES) with a sample of Malaysian in-service (n=191) and pre-service (n=122) teachers. The long-form (24 items) of the TSES was tested using two plausible rival models, the one-factor model, and the theoretically-driven three-factor model. Results from confirmatory factor analysis demonstrated that the baseline three-factor model had a better fit. Standardized factor loadings, standard errors, inter-correlations between factors and reliability coefficients for each factor are reported together with the goodness of fit indices. Minor revisions to improve the fit of the scale for Malaysian teachers are recommended. The TSES scale and the conceptualisation of teacher efficacy are discussed in terms of the cultural and educational context of Malaysia. This study advances the use of the TSES for measuring teachers' sense of efficacy by demonstrating its factor stability within the Malaysian context.

Keywords: Confirmatory factor analysis, in-service teachers, Malaysia, pre-service teachers, Teachers' Sense of Efficacy Scale

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INTRODUCTION

Teachers' sense of efficacy construct has been widely studied by educational researchers over the past several decades. The construct is defined as a belief about one's capabilities to complete a particular

task in order to produce the desired result (Bandura, 1997). Teachers' sense of efficacy has garnered research attention since it has been shown to be related to other important constructs such as commitment to teaching (Johnson & Birkeland, 2003) and job satisfaction (Caprara et al., 2006). Teachers with a higher sense of efficacy report lower job stress (Klassen & Chiu, 2010) and burnout (Skaalvik & Skaalvik, 2010). Furthermore, having a higher sense of teaching efficacy enables teachers to function positively in many aspects of their profession, including dealing with students, the use of teaching techniques and classroom instruction (Guo et al., 2010). Given the range of positive behaviours demonstrated by teachers with high teaching efficacy, it is unsurprising that teachers' sense of efficacy is also positively related to students' achievement (Moulding et al., 2014). In addition to the role of efficacy beliefs for in-service teachers, teachers' sense of efficacy is also an important aspect of the educational beliefs of pre-service teachers, that is, those who are in teacher training programmes. Studies have found that teacher training programmes have a positive influence on teachers' sense of efficacy (Hoy & Spero, 2005).

Bandura (1997) quoted that performance had the most powerful impact on teachers' sense of efficacy. Successful teaching will enhance one's confidence in his or her teaching. Also, apart from one's own experience, teachers' sense of efficacy can also be established through observations of colleagues' performance, when teachers can

make comparisons with their own teaching. For pre-service teachers, they judge their performance through field experience during their training. Li and Zhang (2000) found a positive correlation between teachers' sense of efficacy and field experience perceptions; pre-service teachers with high ratings of their field experience had a higher sense of efficacy and vice versa. Verbal communication is another important source of teachers' sense of efficacy in which teachers get feedback and support from colleagues. This external information helps teachers to form beliefs about their ability to teach. Aydin and Hoy (2005) identified two social factors as significant predictors of pre-service teachers' sense of efficacy, namely, (1) the relationship between pre-service teachers and their mentors and supervisors, and (2) the quality of support from the cooperating teacher and the school community.

Teachers' Sense of Efficacy Scale

One important factor that drives research in teachers' sense of efficacy is that the construct has been well-defined from the work of Tschannen-Moran and Hoy (2001). Through rigorous literature review and analysis, they developed an instrument called Teachers' Sense of Efficacy Scale (TSES). In TSES, teachers' sense of efficacy construct is conceptualized as having three inter-correlated factors, namely, efficacy for instructional strategies (EIS), efficacy for classroom management (ECM), and efficacy for student engagement (ESE). EIS measures the extent of teachers' beliefs about

their capabilities as classroom instructors to facilitate both a conducive learning environment as well as effective learning processes. The capabilities for EIS include teaching strategies, teaching approaches and handling of teaching and learning processes. ECM measures teachers' belief about their ability to have control over the classroom environment. Teachers with high efficacy in classroom management believe that they are able to maintain discipline and have control over students' behaviour and disruptive elements of the classroom. Finally, ESE refers to the extent to which teachers believe they can instil positive attitudes among their students such as influencing students to get engaged in school activities or increasing students' motivation to learn.

Developers of the TSES claim that the scale exhibits a unified and stable factor structure. A stable factor structure is important in order to produce consistent measurements across different samples or settings. The characteristic is an important benefit of the TSES scale as compared with previous measures such as the Teacher Efficacy Scale by Gibson and Dembo (1984) or the Webb Efficacy Scale (Ashton et al., 1984). As such, the TSES has become one of the most widely used instruments for many researchers across the world such as in Australia, Greece, the United States, Turkey, and Singapore. It has been employed in various settings such as for pre-service teachers (Tsigilis et al., 2010), in-service teachers (Milner, 2002) or both (Fives & Buehl, 2010).

Even though the TSES offers many advantages over other instruments, there are also limitations associated with the scale. One important issue surrounding the claim of a stable factor of TSES is that teachers' sense of efficacy is often conceptualised as context-specific (Lin & Gorell, 2001), that is, the meaning and structure of the construct may differ across cultures, or more specifically, across countries (Tsigilis et al., 2010). As rightly argued by Tsigilis et al. (2010), since TSES is developed using samples from the United States, it is essential to test the scale with other samples to investigate the claim of a universally stable factor structure. In the development of TSES, the scale's factor structure was established using exploratory factor analysis (EFA) (Tschannen-Moran & Hoy, 2001). Based on advances in quantitative analysis, a statistical method such as confirmatory factor analysis (CFA) is also available to test the adequacy of instruments with samples from different contexts. CFA can be considered as a more stringent statistical method compared to EFA for the purpose of confirming factor structure because the CFA provides fit indices for a detailed model of a factor structure of the latent construct that can also be tested against other related models.

Recent studies regarding the factor structure of the TSES using CFA draw inconclusive results especially in terms of the number of factors related to the construct. A study by Tsigilis et al. (2010) reported that the baseline three-factor

model showed a better fit compared to the one-factor model. The results in support of the theoretical model are also shared by Klassen et al. (2009) across samples from Canada, Cyprus, Korea, Singapore, and the United States. However, Duffin et al. (2012) found a contradictory finding the one-factor model showed a better fit compared to the three-factor model for both in-service and pre-service teachers. Fives and Buehl (2010), meanwhile, found mixed results – the three-factor model fitted for in-service teachers while the one-factor model fitted for pre-service teachers.

Apart from factor stability, another important focus of research is in terms of the type of TSES used. TSES comes in two forms, namely, the long-form (24 items) and the short form (12 items) with both forms reported by the developers as having acceptable factor stability. Nevertheless, a study by Ruan et al. (2015) in Korea, China, and Japan showed that the baseline three-factor model for each country was established using the short form TSES, while the long-form did not fit in any of the countries. They also reported that one item was deleted from the short-form scale, and one item cross-loaded onto all three factors. Meanwhile, a study by Nie et al. (2012) using the sample from primary and secondary school teachers in Singapore reported that they deleted up to 12 items from the long-form TSES during the process of establishing their baseline model. Additionally, they found that a second-order factor model best fitted the data and thus concluded that teachers' sense of efficacy

could be defined in terms of one general sense of efficacy rather than efficacy in three distinct areas. This raises the issue of the adequacy of the long-form to measure teachers' sense of efficacy across countries, especially in the Asia-Pacific countries. It is considered a particular concern since the long-form is also recommended for use with pre-service teachers (Tschannen-Moran & Hoy, 2001). The mixed results regarding the factor structure and universality of the scale from the above-mentioned studies warrant additional research on the factor structure of the long-form TSES.

Malaysian Teachers' Sense of Efficacy

In Malaysia, there is no documented research on the factor structure of the TSES at present despite extensive local research on teachers' sense of efficacy (and its relationship with other constructs) that employ the TSES (Bakar et al., 2012; Hashim et al., 2014). Johari et al. (2009) showed that types of training and teaching experience were important factors that influenced the in-service teachers' sense of efficacy. Demographic factors such as gender and race also act as important variables for in-service teachers' sense of efficacy (Murshidi et al., 2006). Research using TSES shows that both types of in-service and pre-service teachers demonstrate a high teachers' sense of efficacy (Bakar et al., 2008). These studies provide an empirical base of understanding of Malaysian teachers' sense of efficacy. However, clarity of the factor structure of the TSES has never been conducted. Confirming the factor structure is

an important consideration when measuring latent variables such as teachers' sense of efficacy before additional research is carried out.

Given the Malaysian context as well as evidence that the long-form TSES did not have an adequate fit in some other Asia-Pacific countries, it is possible that not all of the items in the long-form TSES scale will appropriately fit and it is not clear whether the distinct factors of EIS, ECM, and ESE will emerge in Malaysian teachers.

Current Study

The purpose of this study is to investigate the factor structure of the TSES using a Malaysian teacher sample. In Malaysia, supporting teachers' sense of efficacy is an important precursor for effective educational reform. Questionnaires such as TSES are highly valuable instruments for quickly measuring and comparing teachers' sense of efficacy. However, before scales such as TSES can be used more widely in the Malaysian context, this scale needs to be appropriately tested among Malaysian teachers to ensure it is valid. The findings will also add to the broader body of knowledge regarding issues on the threat to factor stability of the TSES.

At the moment there are two plausible models that explain the factor structure of the TSES: the one-factor model representing teachers' sense of efficacy as a unidimensional construct (Duffin et al., 2012; Fives & Buehl, 2010) and the three-factor model derived from the work of Tschannen-Moran and Hoy (2001)

mentioned above and supported by other studies (Klassen et al., 2009; Nie et al., 2012; Ruan et al., 2015). The study is thus guided by two research questions:

(1) Do the 24 items of the long-form TSES scale have an adequate factor structure among Malaysian teachers?

(2) Does the theoretical three-factor model or the one-factor model have a better fit? In other words, do Malaysian teachers' have distinct beliefs about their capabilities to use teaching practices that support student engagement, classroom management, and instructional strategies?

METHOD

Research Design

The present validation study adopted a cross-sectional study design. Data were collected in a single time period and the study involved translation and cultural adaptation of the original version as well as providing evidence of the validity of the measurement from the TSES.

Population

According to the Ministry of Education (2017), there are 422,505 in-service teachers in Malaysia (male = 125,803, female = 296,702). However, the exact numbers of pre-service teachers are not available. This is because the teacher training program is not fully under the ministry. Rather, it is conducted by various agencies, such as universities, teacher training colleges, and private institutions.

Sample

A sample of 191 in-service and 122 pre-service teachers participated in the present study using the purposive sampling framework. The framework was employed so that the two groups of teachers could be identified. In addition, this framework eliminated teachers who did not receive formal training in education. The in-service teachers consisted of 45 males (23.6%) and 146 females (76.4%) secondary teachers from local public schools in the state of Penang, Kedah, and Perak in the northern part of Malaysia. Meanwhile, responses from the pre-service teachers were gathered during one of the common courses in a local public university. There were 21 males (17.2%) and 101 females (82.8%) in this group who were training for secondary school teaching. The inclusion of both groups of teachers was replicated from the method employed by Tschannen-Moran and Hoy (2001) during the development of the TSES. Understanding pre-service teachers' sense of efficacy is essential to understanding the construct itself because self-efficacy is established during the early years of teacher training programs (Bandura, 1997).

Instrument

The 24-item long version of TSES (Tschannen-Moran & Hoy, 2001) was used in this study. Given that the measurement of TSES was being tested among Malaysian teachers for the first time, the long version was considered more robust and could provide more potentially useful information

than the short form. Several modifications were made to the scale. Firstly, it was translated into Malaysian Language by a panel of experts consisting of a psychometric lecturer and one psychology lecturer using a back-to-back translation procedure. In this procedure, both experts translated the original version of the TSES and then their translations were compared, and the consensus was obtained on the final translation draft. Then, a language teacher with more than 20 years of experience examined the draft and provide the researchers with the final translated version of the scale. Secondly, several items have been slightly rephrased in order to suit the Malaysian educational context. The original Item 22, "*How much can you assist families in helping their children do well in school?*" was rephrased as "*How much can you involve families to make sure their children complete homework?*" This is because it is a norm that Malaysian parents' involvement centres on ensuring their children do homework. Also, teachers consider completing homework like a good indicator for students to do well in school. Item 23 was also rephrased into "*How well can you teach differently if the students did not understand?*" from the original version of "*How well can you implement alternative strategies in your classroom?*" The formal classroom setting in Malaysia is very structured. As such, teachers always teach according to what they consider the best way for every session rather than trying alternative strategies. Therefore, we provide a situation ("when students

did not understand”) to gauge information about their ability to implement alternative strategies. Thirdly, as suggested by Bakar et al. (2012), some Malaysian teachers were not able to sufficiently differentiate between all the 9-point options on the Likert-scale of the instrument. Therefore, the scale is reduced to 5 points where “1” represents “Nothing” and “5” indicates “A great deal”.

Procedure

Teachers were invited to fill in the paper-based questionnaire. For the in-service teachers, they filled in the questionnaire at their training centres (such as hotels and education centres) during their in-service courses. Meanwhile, data collection for the pre-service teachers was gathered in the lecture hall during a common course. Both groups of teachers were able to complete the questionnaire within 10 minutes. Completed surveys were collected by the researcher and inputted into an electronic database. Prior to filling in the questionnaire, the samples were

asked for their consent. Ethical standards and procedures were carefully followed throughout the study, including ensuring the confidentiality of the data. The matrix for data collection is presented in Table 1.

Data Analysis

The factor structure for the TSES was estimated using CFA with *Mplus* 6.0 software. The plan of analysis included assessing the standardized factor loading and standard error for each item, evaluating the goodness of fit indices for each model, examining the inter-factor correlations, as well as determining the reliability for each factor in the baseline model. Items with standardized factor loadings below 0.50 fail to support an underlying solid factor (Sexton et al., 2014) and therefore would be dropped. In addition to high factor loadings, the intended result also included a moderate inter-factor correlation (below 0.80). In order to evaluate how well the baseline

Table 1

Matrix for data collection

Data Collection Method	Data Sources	Time	Role and Responsibility
Administration of the questionnaire	In-service and pre-service teachers	During in-service training courses (for in-service teachers) and during the common course at university (for pre-service teachers)	Research assistants – to administer and collect questionnaires for the in-service teachers. The corresponding author - to administer and collect questionnaire for the pre-service teachers

models fit the data, several goodness-of-fit indices were employed including the normed chi-square (χ^2/df), comparative fit index (CFI), Tucker-Lewis Index (TLI), root mean square of estimation (RMSEA), and Root Mean Squared Residual (SRMR). The threshold values for these indices are provided in Table 2.

RESULTS

Table 3 presents the fit indices for the models that were estimated. The one-factor model demonstrated poor fit ($\chi^2/df = 2.95$, CFI = 0.828, TLI = 0.812, RMSEA = 0.079, and SRMR = 0.060). The theoretical three-factor model was a significant improvement over the one-factor model ($\Delta^2 = 159.77$, $\Delta df = 3$, $p < 0.001$) yet did not reach the threshold for standard goodness of fit across all indices ($\chi^2/df = 2.35$, CFI = 0.883, TLI = 0.870, RMSEA = 0.066, and SRMR = 0.054). In establishing the new baseline model for the Malaysian sample, the theoretical three-factor model factor structure was maintained. However, based on factor loadings and suggestions from the modification indices, the following modifications were made: Q1 (*How much*

can you do to get through to the most difficult students?) and Q2 (*How much can you do to help your students think critically?*), both related to the ESE, were dropped due to low standardized loadings (below 0.50) and no strong suggestions that they cross-loaded on other variables. Q5 (*To what extent can you make your expectations clear about student behaviour?*) was dropped from ECM due to low standardized factor loading (below 0.50) and moved to ESE where it had a better fit as evidenced by a significant factor loading (0.56, $p < 0.001$). Note that the overall estimated model with Q5 moved to the ESE factor did not have a significantly different fit compared to the model where it was cross-loaded on both factors, thus the simpler model was preferred. The baseline model demonstrated a significant improvement over the theoretical model and had an acceptable goodness of fit ($\chi^2/df = 2.19$, CFI = 0.908, TLI = 0.897, RMSEA = 0.062, SRMR = 0.047, AIC = 10722.78). Modification indices also suggested that some residual covariances between items could be included (e.g., Q3 and Q8) to further improve the goodness of fit of the scale. However, this level of specificity is

Table 2
The goodness of fit indices

Index	Threshold	Source
χ^2/df	≤ 3.0	Byrne (2004)
CFI	≥ 0.90	Browne and Cudeck (1993)
TLI	≥ 0.90	Hu and Bentler (1999)
RMSEA	≤ 0.10	Hu and Bentler (1999)
SRMR	≤ 0.05	Hu and Bentler (1999)

beyond the scope of this study. The baseline three-factor model suggested that there is a high correlation (>0.80) between ESE and EIS. Thus, it warranted further investigation regarding whether the two factors were distinct. As such, a baseline two-factor model of TSES where ESE and EIS were combined (along with modifications from the baseline model) was tested. The model also had an acceptable goodness of fit: ($\chi^2/df = 2.22$, CFI = 0.910, TLI = 0.895, RMSEA = 0.084, and SRMR = 0.054). A χ^2 difference tests were conducted based on the chi-square values of the two models and results showed that the three-factor model had a significantly better fit than the two-factor model ($\Delta\chi^2 = 10.52$, $\Delta df = 2$, $p = 0.005$).

The standardized factor structure loadings (λ) for each factor, their standard errors (SE), inter-factor correlations, and Cronbach's α reliability coefficient for each factor are described in Table 4 and Table 5. All of the final factor loadings for the TSES across the three factors were significant and above 0.50. There were strong positive correlations between factors, especially between ESE and EIS. Consistencies of the factors were acceptable based on high Cronbach's α reliability coefficient, meaning that it is highly likely that the responses are replicable if the TSES is administered across comparable samples.

Table 3
Fit indices for the models

Indices	One-factor	Theoretical three-factor	Baseline three-factor	Baseline two-factor
χ^2 (df)	744.32 (252)	584.55 (249)	452.13 (206)	462.65 (208)
χ^2/df	2.95	2.35	2.19	2.22
p-value	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$
CFI	0.828	0.883	0.908	0.910
TLI	0.812	0.870	0.897	0.895
RMSEA	0.079	0.066	0.062	0.084
SRMR	0.060	0.054	0.047	0.054

Note: Baseline three-factor and two-factor models had Q1 and Q2 dropped and Q5 moved to ESE.

Table 4
Standardized factor structure loadings and standard errors

Item	Factor	λ	SE
<i>Efficacy for Student Engagement</i>			
Q4	How much can you do to motivate students who show low interest in school work?	0.629	0.039

Table 4 (Continued)

Item	Factor	λ	SE
<i>Efficacy for Student Engagement</i>			
Q4	How much can you do to motivate students who show low interest in school work?	0.629	0.039
Q5	To what extent can you make your expectations clear about student behaviour?	0.555	0.043
Q6	How much can you do to get students to believe they can do well in schoolwork?	0.617	0.040
Q9	How much can you do to help your students to value learning?	0.698	0.033
Q12	How much can you do to foster student creativity?	0.644	0.038
Q14	How much can you do to improve the understanding of a student who is failing?	0.540	0.044
Q22	How much can you assist families in helping their children do well in school?	0.508	0.046
<i>Efficacy for Instructional Strategies</i>			
Q7	How well can you respond to difficult questions from your students?	0.526	0.045
Q10	How much can you gauge student comprehension of what you have taught?	0.627	0.039
Q11	To what extent can you craft good questions for your students?	0.567	0.043
Q17	How much can you do to adjust your lessons to the proper level for individual students?	0.582	0.042
Q18	How much can you use a variety of assessment strategies?	0.576	0.042
Q20	To what extent can you provide an alternative explanation or example when students are confused?	0.667	0.036
Q23	How well can you implement alternative strategies in your classroom?	0.637	0.038
Q24	How well can you provide appropriate challenges for very capable students?	0.587	0.041
<i>Efficacy for Classroom Management</i>			
Q3	How much can you do to control disruptive behaviour in the classroom?	0.698	0.033
Q8	How well can you establish routines to keep activities running smoothly?	0.694	0.033
Q13	How much can you do to get children to follow classroom rules?	0.700	0.033

Table 4 (Continued)

Item	Factor	λ	SE
<i>Efficacy for Student Engagement</i>			
Q15	How much can you do to calm a student who is disruptive or noisy?	0.768	0.027
Q16	How well can you establish a classroom management system with each group of students?	0.718	0.031
Q19	How well can you keep a few problem students from ruining an entire lesson?	0.690	0.033
Q21	How well can you respond to defiant students?	0.743	0.028

Table 5

Inter-factor correlations and reliability coefficients

<i>Inter-factor correlations</i>	
Efficacy for Student Engagement - Efficacy for Instructional Strategies	0.933
Efficacy for Student Engagement - Efficacy for Classroom Management	0.795
Efficacy for Instructional Strategies - Efficacy for Classroom Management	0.760
<i>Cronbach's α reliability coefficient</i>	
Efficacy for Student Engagement	0.790
Efficacy for Instructional Strategies	0.812
Efficacy for Classroom Management	0.880

DISCUSSION

The current study aimed to extend previous research on teachers' sense of self-efficacy by examining whether a common measure of teachers' efficacy had acceptable fit within Malaysian samples of in-service and pre-service teachers and to determine the number of factors in the TSES. The present study employed CFA to examine the factor structure based on suggestions by previous researchers. In this study, two items that were supposed to load on the ESE factor, namely Q1 and Q2 did not provide enough evidence regarding the adequacy of these items to measure the factor. For Q1, a similar result

was found from a previous validation study of the TSES in Singapore (Nie et al., 2012). It did not appear that Q1 might better fit on another factor of the TSES. With regards to Q2, it was understandable that the item did not fit well because even though critical thinking is an important part mentioned in the Malaysian curriculum; these aspects of learning are rarely emphasized in Malaysian schools. For example, research by Hamzah et al. (2011) showed that teachers did not see the benefits of sharing knowledge and expertise across subjects for enhancing creativity. Rather, teaching innovations occurred in small groups, and within the

subject, as well as among several teachers. According to Piaw (2011), the inability to think creatively stems from hindrances to internal creativity, even in the initial teacher training phase. Therefore, either the item did not make sense within this context, or else teachers' sense of efficacy in their ability to support students' criticality is viewed as separate from their sense of efficacy for enhancing student engagement.

The finding also shows that Q5 is the best fit for the ESE factor. It is not clear why this is the case. However, researchers have conceptualised engagement as multi-dimensional and containing aspects of cognition, emotion, and behaviour (Fredricks et al., 2004). Thus, it is possible that this item taps into teachers' beliefs about their ability to foster students' behavioural engagement by setting clear expectations about this behaviour. As another possibility, the item may be too vague in the sense that making clear expectations about behaviour could refer to instruction, management, or engagement. To better understand these item-level issues, it is recommended that several Malaysian teachers should be interviewed to determine how they understand the meaning of each item and what it means for their sense of efficacy. An interview is seen as an important method for attaining a deeper understanding of teachers' understanding of these items (Karabenick et al., 2007).

In summary, the abovementioned discussions provide insights that the theoretical three-factor TSES structure can be generalized within the context of

Malaysian samples of in-service and pre-service teachers. However, users in Malaysia need to carefully consider the behaviour of items Q1, Q2, and Q5 especially in calculating the composite scores for the ESE, EIS, and ECM. This consideration is essential particularly if researchers have the intention to conduct studies on group differences as well as other statistical inferential using the TSES. Also, it should be noted that reports on the behaviour of the (problematic) items are unique to the present study and has not been reported in other validation studies in other countries. It is perhaps not too off the mark to say that it is possible because of the use of a more stringent method of CFA compared to the EFA.

The present study also found that Malaysian teachers had distinct beliefs about their capabilities to use teaching practices that support student engagement, classroom management, and instructional strategies. Even though the high inter-factor correlations may indicate multicollinearity, that is, two or more factors are highly correlated. Nevertheless, this is a common phenomenon of many studies on the TSES (Nie et al., 2012; Ruan et al., 2015; Tsigilis et al., 2010). In this study, the issue of multicollinearity is addressed by testing the one-factor and two-factor models against the three-factor model. In addition, the factors were treated as latent variables and therefore measurement errors were taken into account. It should be noted that the TSES developers themselves maintain that the factor structure is less distinct for

pre-service teachers (Tschannen-Moran & Hoy, 2001). Nevertheless, in a quest for a better understanding of the TSES, future research should be conducted to study the source of a high correlation between EIS and ESE. In addition, to address the high factor inter-correlations, future work should also examine the measurement invariance of the TSES across pre-service and in-service teachers to provide possible information with regards to the distinction between factors.

CONCLUSIONS

The adaptation of an existing instrument to another context, however, is an on-going process. The current study was limited in that minor revisions had to be made to the items thus restraining some comparisons to other studies. In addition, the present study was also limited in terms of generalization since the samples were only from the northern part of Malaysia. Further studies should also be encouraged in terms of assessing the factor structure of the TSES and how it may vary across different types of teachers, including exploring individual differences based on gender, educational levels (primary/secondary), or teachers with high and low sense of efficacy, in order to enable the development of norms within the Malaysian sample that would enable researchers and stakeholders to have a better understanding of the teachers' sense of efficacy construct. Moreover, there are many elements of reliability and validity that should be considered before having strong confidence in a questionnaire. Investigation

of the predictive validity of measurement from TSES with other constructs such as quality of work-life or commitment would strengthen the generalizability of the TSES. Nevertheless, perhaps it is not too off the mark to conclude that this study has advanced the use of TSES in a Malaysian sample and provided evidence of good factor structure using the three-factor model, and in that process apprehended the value of TSES as an important instrument for assessing teachers' sense of efficacy.

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Two Decades of Research on Early Career Faculties (ECFs): A Bibliometric Analysis of Trends Across Regions

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ABSTRACT

Early Career Faculties (ECFs) are an important demographic of university faculty population shaping the future of the institution and higher education, despite the challenges they face as new academics. Analysis of scholarly output on ECFs offers useful data to inform and aid both national policy formulations and institutional planning decisions especially in ECFs'

support and development. Peer-reviewed high impact journals and academic databases provide highly valid and reliable sources of data and information on ECFs. This study examines the trend of ECFs research over two decades comparing scholarly output and research impact across global regions, in Web of Science and Scopus Elsevier. The bibliometric analysis highlights key topics of research and publications related to ECFs and identify the regions and countries most actively research on the topic. The trend

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of research on ECFs has been found to increase exponentially beginning the 1990s worldwide, mostly from western institutions (76%). Publications after the year 2012 focused more on issues related to ECFs' preparation towards life in academia, their motivation, and challenges, the support structure for ECFs and strategies to adapt to life as faculty members. Such bibliometric analysis findings can be a useful reference for policy formulation within national or regional systems of higher education, and institutional strategic planning.

Keywords: Academics, bibliometric analysis, early-career faculty, higher education, trends

INTRODUCTION

Since academic careers in higher education are increasingly fraught with challenges and pressures, it is important for countries and higher education institutions to focus on data and information about Early Career Faculty (ECF) who make up the bulk of new hires. Because global ranking regimes such as the QS World Top University and the Times Higher Education Survey pit universities against one another for top spots, universities must compete to maintain or improve their rankings. In addition, the explosion in the number of higher education institutions worldwide in the past five years, coupled with a volatile global economy, require universities in the 21st century not only to compete for students, research grants, and funding, but also for the knowledge-worker talents that drive knowledge creation and dissemination, viz., namely faculty members.

According to Bayer and Dutton (1977), the career of a faculty member can be categorized into four stages based on working experience: (1) fledglings (fewer than 5 years); (2) maturing academics (5 to 10 years); (3) established academics (11 to 25 years); and (4) patriarchs (more than 25 years). More recently, other terminologies used to describe academics in their initial career stages include early career faculties (ECFs), early career researchers (ECRs), new lecturers, novice academics, assistant professors, and emerging scholars (Bleckman et al., 2016; Leech et al., 2011). Notwithstanding such variation in terminologies, most of these terms describe newly recruited academic faculty members, often with freshly minted doctorates, who are now expected to perform a full range of academic roles, predominantly teaching, research, supervision, and administrative or leadership service to the university.

ECFs arguably represent a very important demographic of the university faculty population, and it is no exaggeration to state that ECFs are generally the future of academia and specifically of individual institutions. ECFs provide a bridge between graduate students who are to become faculty members, as well as between industry practitioners who subsequently enter academia. Because the majority of ECFs are relatively young and just freshly started in the academic profession, they also offer the longest period of service till retirement, policy and strategic decisions related to faculty recruitment, faculty development, or other faculty-related long-term plans

necessarily require data and information about ECFs.

Analysis of scholarly output on ECFs offers a wealth of useful data that can inform and assist both in national policy formulations and institutional planning decisions. Such data can also help universities develop and support young faculty members to enable them to remain in active service over a long period of time and contribute to the university's goals and strategic planning decisions. Given the stringent quality standards of peer-reviewed high-impact journals and academic databases, such repositories of academic research can provide policymakers and strategic planners with highly valid and reliable data and information, unrivalled in quantity and quality, about ECFs. The discussion herein, an analysis of research and publication data indexed in comprehensive academic databases (i.e. bibliometric analysis), is intended to be a useful tool for examining trends in research on ECFs.

Early Career Faculties (ECFs)

Yusop and Kamarulzaman (2016) found that ECFs experienced two main stages of challenge: (i) personal challenges, and (ii) institutional challenges. An example of a personal challenge is finding a balance between family needs and work commitment. ECFs are also concerned about institutional challenges related to teaching and learning, research and publication. Other challenges also include difficulties in maintaining a work-life balance, struggling for tenureship, unclear expectations, lacking

mentorship, and funding and academic sustainability (Austin & Rice, 1998; Bazeley, 2003; Diniz-Filho et al., 2016). These challenges can hinder them from advancing in their professional development along with decelerating their progress towards becoming effective academics.

Intense work and work-life interference can lead to exhaustion, stress, overload, anxiety, insecurity, and shame (Ryan-Flood & Gill, 2010). ECFs regularly find their work frustrating, unrewarding, and intolerably difficult because of inadequate support, increasing their risk of becoming casualties of the profession. ECFs may also feel less confident about their capability and more inclined to quit academe (Barlow & Antoniou, 2007), and studies have shown that in the medical field particularly, younger faculty members are at greater risk of leaving academia (Corrice et al., 2011; Pololi et al., 2012). With all these challenges, ECFs are acutely aware of the dire need to find targeted career support during their first years in academia (Ferguson & Wheat, 2015).

Related concerns about academic staff attrition rate and the need to retain ECFs may be a major reason that many institutions expend resources to establish faculty-support development initiatives, enabling ECFs to undergo professional learning and development through formal and informal interactions at the workplace (Eraut, 2007). Such initiatives may include mentoring and induction programmes as well as the adoption of Lave and Wenger's (1991) Communities of Practice (CoP)

model to provide support for ECFs. While mentoring helps ECFs transition into academic positions, there is little evidence of structured mentoring activities in academia (Zellers et al., 2008). Quinlan (1999) suggested that informal mentoring seemed to be the prevalent approach in most higher education institutions, and Turner et al. (2016) argued for the need for careful framing of mentoring relationships in terms of professional development and teaching enhancement to ensure positive relationships between mentor and mentee. As a result, some universities have initiated induction programmes for their emerging scholars to provide support and assist them in understanding their new roles in academia. For example, Malaysia's top-ranked University of Malaya supports ECFs through its Emerging Academics Learning and Development programme, otherwise known as the EmeraLd programme. EmeraLd provides early career learning and development in core competencies required of an academic career: teaching and learning (including blended and e-learning), researcher development, student supervision, along with leadership development and promotion of well-being (Academic Enhancement and Leadership Development, 2016). The EmeraLd programme includes a welcome briefing meet-up that serves as a foundation for peer-mentorship and inter-faculty networking. Similarly, the Faculty Learning Community (FLC) model was initiated decades ago at Miami University, USA, to provide support for their ECFs (Cox & Richlin, 2004), and a range of other

mentorship and ECF development models can be found in many universities around the world.

The above discussion represents only a qualitative sampling of existing research on ECFs, and a larger scope of analysis of the wider body of academic work on ECFs might point to other pressing issues concerning ECFs, knowledge of which would benefit universities, higher education policymakers, and authorities in their planning and decisions regarding academic faculty. In particular, a bibliometric analysis of scholarly output and research impact of ECFs-related literature would offer a useful tool for such analysis.

Bibliometric analysis is a quantitative method of analyzing publication rates, citations, impact factors, and other bibliographic data with the goal of unearthing publication trends and relationships. Bibliometric analysis is useful for examining research and publication output in particular disciplines or measuring the extent of scholarly attention given to a particular topic, e.g., ECF. In the field of higher education studies, bibliometric analysis is an emergent method for examining researcher profiles and careers (Besselaar & Sandström, 2015; Nane et al., 2017) as well as citation patterns (Azer, 2015; Calma & Davies, 2017; Martin-Martin et al., 2017). There still remains, however, the lack of a comprehensive international bibliometric analysis of ECF research and publication to highlight key issues of concern regarding ECFs and, as discussed earlier, such data could be useful for stakeholders and strategic planners who deal with faculty talent in higher education.

This study examines the trend of ECF research over the last two decades, comparing scholarly output and research impact across the globe captured in two major global academic databases, viz., Thomson Reuters (presently Clarivate Analytics) Web of Science (WoS) and Scopus Elsevier, both offering a wealth of knowledge that can serve as input for strategic direction, not only for academic/scientific researchers but also for government institutions and corporations (e.g. Elsevier, n.d.).

This paper explores longitudinal trends of research and publication on ECFs, and subsequently highlights key topics related to ECFs as well as identifying and offering conclusions and recommendations about the regions and countries most actively engaged in research and publishing data regarding ECFs.

METHODS

Phase I: Identification of Keywords

To identify keywords similar to “Early Career Faculty (ECF)”, the first phase of this study was a qualitative survey of academicians, followed by a moderation meeting of the paper’s authors to finalize the keyword list and check it against existing publications.

Using a non-probability convenience sampling method, the authors distributed a Google Form questionnaire to a group of 60 experts, Directors and Deputy Directors of teaching and learning centres of 20 public universities, responsible for planning and managing training for academics in their own universities. The questionnaire was

distributed via email, social media, and instant messaging services (e.g., WhatsApp). The survey questionnaire form briefly introduced the study, informing respondents that the survey’s aim was to identify relevant keywords or alternative terms applied to ECFs. The questionnaire comprised two questions. The first listed nine keywords or alternative terms for ECF, and respondents were asked to select one or more of these keywords they would use if they were conducting an academic search for the term “Early Career Faculty”. The second open-ended question asked respondents for other keyword suggestions. Fifty-two experts responded (an 86.7% return rate), and 35 provided additional keyword suggestions. Figure 1 shows the list of keywords resulting from the survey.

As indicated in Figure 1, while “Early Career Academics”, “New Lecturers”, and “Early Career Faculty” were the most popular terms selected as keywords for ECF, other keywords also received a substantial number of votes. In addition to selecting preferred keywords from the original list of terms, respondents also suggested the new ECF keyword terms shown in Table 1.

After a moderation meeting, the authors of this paper agreed that the keywords shown in Table 2 would be used as search terms to compile bibliometric records of ECFs-related publications from Web of Science Core Collection (WoS) and Elsevier Scopus (Table 2). Finally, all possible variations of the keyword sets were converted into search queries. For example, “university lecturers” was transformed into “universit* lecturer*” to increase the number of search engine hits.



Figure 1. Diagram of results from the online survey

Table 1
Alternative keywords for Early Career Faculty (ECF)

Suggestion	Frequency
Young lecturers	5
Young academics	3
New academics	5
New faculty	1
Assistant professor	1
Novice academicians	1
Early potential educators	1
Fledglings	1
Young scholars	1
Young researchers	1
Emerging faculty scholars	1

Table 2
Keywords used to search WoS and Scopus for ECF-related records

Keywords		
New college instructor*	Universit* lecturer*	New* academic
New college professor*	New lecturer*	Novice academic*
New college lecturer*	Prepar* future facult*	New academic*
New college* teacher*	Novice lecturer*	Young lecturer*
New college* facult*	Emerg* scholar*	New* academic*
Young college teacher*	Novice faculty*	Novice academic*
Early career faculty	New faculty*	New academic* staff*
Early career researcher*	College instructor*	Young scholar*
Early career academic*	Young* academic*	Young researcher*
Universit* teacher*	Young lecturer*	Young academician*

Phase II: Data Collection Procedure

In the second phase of this study, based on the finalized and validated keywords identified in the first phase, data related to relevant publications were extracted from two well-known academic databases, viz., the WoS and Scopus. Data collection took place in February 2017 from access points at the University of Malaya, a research university in Malaysia that subscribes to both the WoS and Scopus databases. A total of 826 documents were retrieved from WoS, with 1071 retrieved from Scopus for

the same search queries, resulting in a total number of 1897 records from the two main databases. Figure 2 is a flow chart of the retrieval process.

Data Screening

All 1897 records were screened before further analysis. In the first screening step, all records from WoS and Scopus were integrated into one Excel sheet, with duplicated records removed from the list. After duplicates had been removed, a total of 1439 records remained for analysis.

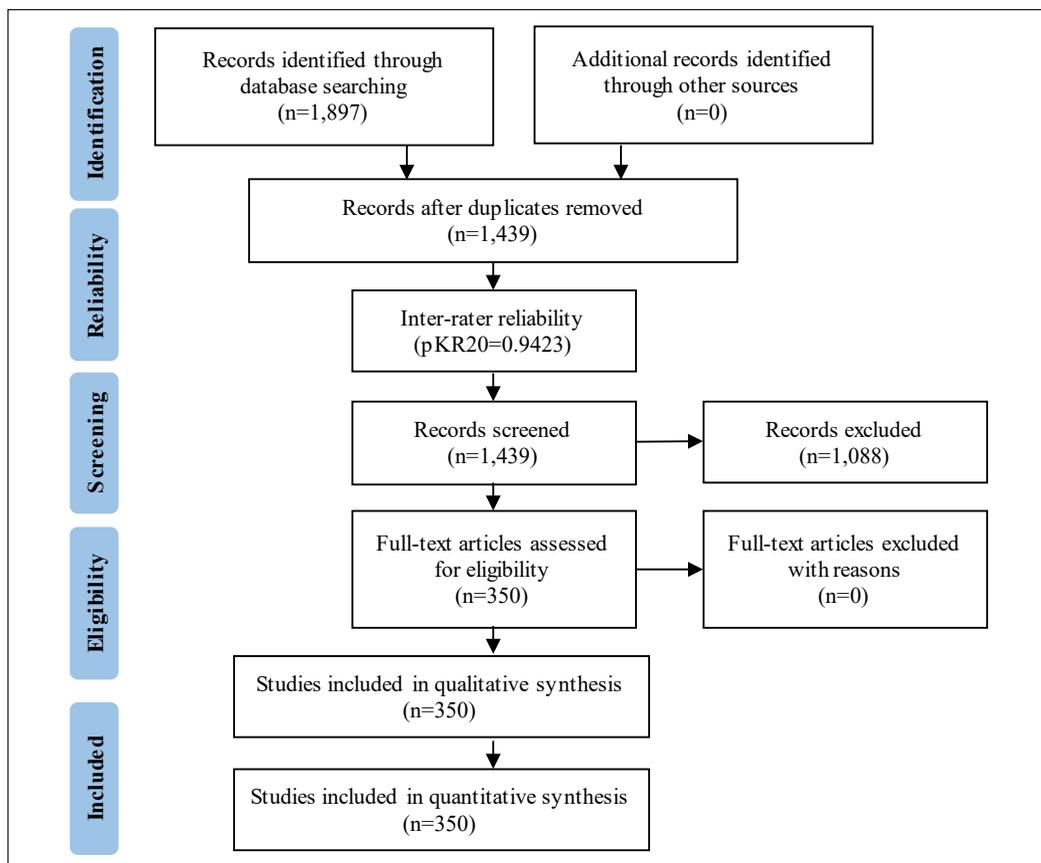


Figure 2. A flow diagram of the study methodology

Inclusion and Exclusion Criteria

To qualify as a record to be included in the bibliometric analysis, a document had to satisfy all the following criteria: 1) be listed in either WoS and/or Scopus databases; 2) include an abstract and full text; 3) be a research study conducted within the context of higher education.

Inter-rater Reliability

Ten articles were randomly selected and distributed to all nine authors of this paper, and each scrutinized the title and abstract of each article to determine its eligibility based on the inclusion and exclusion criteria detailed above. An article to be included in the bibliometric analysis would be marked with 1, while an article to be excluded would be marked with 0.

A scale or test is considered reliable to the extent that repeated measurements made under constant conditions produce the same

result (Moser & Kalton, 2017). Inter-rater reliability evaluation in which data were independently coded and compared for the agreement was performed. Subsequently, all records were compiled and the Kuder-Richardson Coefficient of Reliability (K-R 20), a test checking for internal consistency of measurements with dichotomous choices, was used to check for inter-rater reliability. The result, presented in Table 3, was 0.9423 (> 0.8), representing nearly complete agreement, indicating that all nine researchers were in strong agreement regarding the determination as to whether a document should be included or excluded from the analysis, so no further refining of criteria or coder training was needed.

Eligibility

Subsequently, all 1,439 articles (with title and abstract) were randomly distributed to the nine authors for screening under the

Table 3
Results of the degree of agreement between experts (Kuder-Richardson Coefficient of Reliability (K-R 20) test)

	Researcher 1	Researcher 2	Researcher 3	Researcher 4	Researcher 5	Researcher 6	Researcher 7	Researcher 8	Researcher 9
Article 1	0	0	0	0	0	0	0	0	0
Article 2	1	1	1	1	1	1	1	1	1
Article 3	0	0	1	1	0	0	1	0	0
Article 4	0	0	1	1	0	0	1	0	0
Article 5	1	1	1	1	1	0	1	1	1
Article 6	0	0	0	0	0	0	0	0	0
Article 7	0	0	0	0	0	0	0	0	0
Article 8	1	1	1	1	1	1	1	1	1
Article 9	1	0	1	1	1	0	1	0	0
Article 10	1	1	1	1	0	1	1	1	0

same inclusion and exclusion criteria used for the inter-rater reliability check. It was found that a majority of the documents, because they did not meet all four eligibility criteria, had to be excluded, resulting in 350 articles found to be relevant to ECF and eligible for bibliometric analysis.

DATA ANALYSES

The Trend of Publication for Both WOS and Scopus Databases During 1993 to 2017

The terms used to describe ECFs differed across regions. American-based journals tended to use the term ‘faculty’ for academic staff, and this designation had an impact on the metrics employed by the data search. In other parts of the world, especially in British and its commonwealth-based institutions, the term ‘faculty’ mostly refers to the collection of several schools within the university context, with the term ‘academics’ or ‘lecturer’ more prevalent in articles originating from this region.

Since work on ECFs emerged only in 1993, there were fewer than 10 ECF-generated publications between 1993 and 2010 in both databases, and some years

produced no ECF-related publications at all. Following 2010, however, the number of ECF-related publications in both databases began to rise, with the trend of publication in WoS reflecting a significant increment after 2012 (Figure 3), with the total number of related publications reaching 35 in 2016. In the Scopus database, the number decreased after 2012.

The overall trend is clear and indicates that since 2010, research and publications on issues affecting ECFs are increasing. Further analysis of the themes of publications post-2012 reflected a focus on issues such as preparation towards life in academia, motivation and challenges, support structures for ECR, and strategies to adapt to life as a faculty member. The increase in ECF-related publication is comparable between WoS and Scopus ($R^2 = 0.73$ & 0.82 , respectively), with the volume of work higher in Scopus because of the inherent nature of the databases.

Types of Document

Frequency analysis results related to the type of publication shows that the highest frequency for both databases belonged

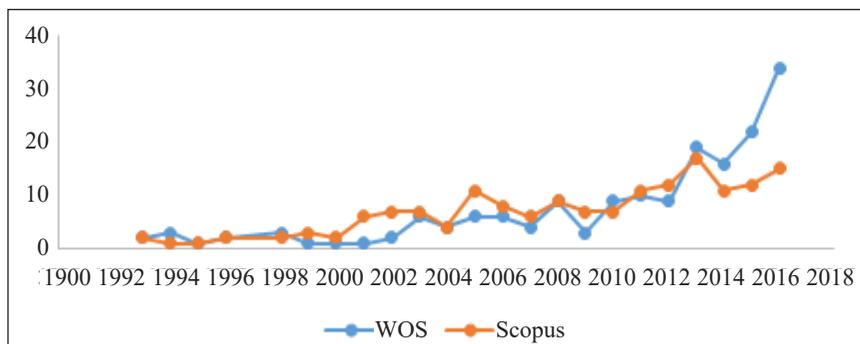


Figure 3. The trend of publication for both WoS and Scopus databases

to “articles” in both WoS (N=127) and Scopus (N=106), followed by proceedings papers, as seen in Figure 4. The frequency of review articles in Scopus (N=7) database was greater than that for WoS (N=1), with nearly 80% of the ECF-related work appearing in journal articles, conference papers, editorials, and reviews. It should be noted, however, that the search was limited to materials cataloged online.

Geographical Distribution for Publication

Geographical distribution of publications has become an interesting indicator of

the research productivity of individual countries, regions, or institutions, and the results related to geographical distribution of contributions in this field (Figure 5) indicates that the highest number of ECF-related publications originate from the USA (43%), followed by European countries (33%). The contribution of Asian countries was only 14%, while South American countries accounted for only 1% of the ECF-related research. This regional distribution of ECF-related research is indicative of general publication trends in most fields and disciplines.

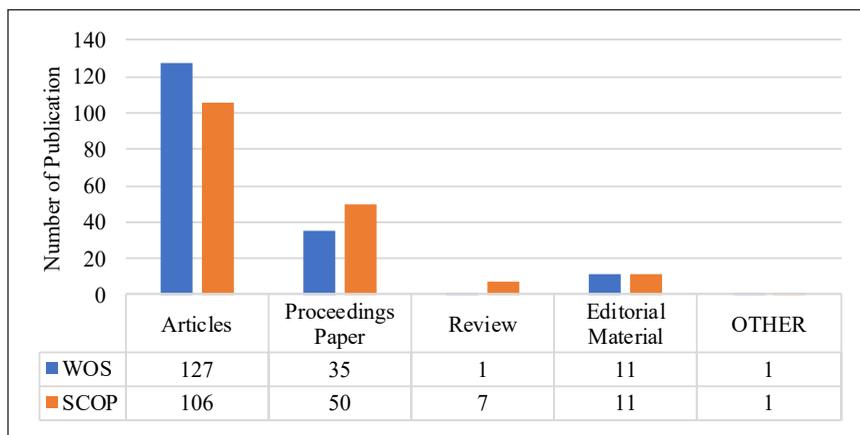


Figure 4. Type of document

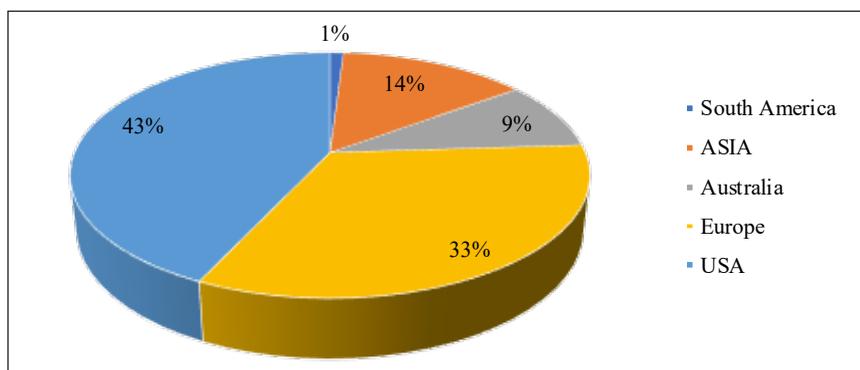


Figure 5. Geographical distribution of publication for both WOS and Scopus databases from 1993 to 2017

Top Ten Publications

A total of 20 authors contributed to the ten most-cited articles (Table 4), with the most frequently cited article, published in 1998 in the Scopus database, received 73 citations. According to the results for

articles published between 1998 and 2008, five frequently cited papers were found in WoS, and the other five were from the Scopus database, with eight out of the ten top publications published in educational journals.

Table 4

Top ten publications based on the total number of citations for both WOS and Scopus databases from 1993 to 2017

No	Author	Title	Year	Journal	Database	Citation
1	Boyle, P., Boice, B.	Systematic mentoring for new faculty teachers and graduate teaching assistants	1998	Innovative Higher Education	SCOPUS	73
2	Archer, L.	Younger academics' constructions of 'authenticity', 'success' and professional identity	2008	Studies in Higher Education	WOS	65
3	Schrodt, P., Cawyer, C. S., Sanders, R.	An examination of academic mentoring behaviours and new faculty members' satisfaction with socialization and tenure and promotion processes	2003	Communication Education	SCOPUS	46
4	Laudel, G; Glaser, J	From apprentice to a colleague: the metamorphosis of early career researchers	2008	Higher Education	WOS	35
5	Sorcinelli, M. D.	Effective approaches to new faculty-development	1994	Journal of Counselling and Development	WOS	34
6	Schenkein, H. A., Best, A. M.	Factors considered by new faculty in their decision to choose careers in academic dentistry	2001	Journal of Dental Education	SCOPUS	33
7	Brown, H. N.	Mentoring new faculty	1999	Nurse Educator	SCOPUS	26
8	Lewallen, L. P., Crane, P. B., Letvak, S., Jones, E., Hu, J.	An innovative strategy to enhance new faculty success	2003	Nursing Education Perspectives	SCOPUS	25
9	Warhurst, R. P.	Cigars on the flight-deck': new lecturers' participatory learning within workplace communities of practice	2008	Studies in Higher Education	WOS	25
10	Siler, B.B., Kleiner, C.	Novice faculty: encountering expectations in academia	2001	Journal of Nursing Education	WOS	25

The top five most-cited publications discussed mentoring and institutional support for ECFs across a variety of geographic regions, and the geographical distribution of ECF-related work indicates that discussion on the issues affecting ECFs is universal.

Visualizing Subjects Across Databases

Figure 6 provides an overview of the frequency of different subjects and keywords across the 170 WoS subject categories. In general, closeness in the location of two subject categories reflects the strength with which they are related to one another, while the size of a subject category reflects the number of publications on the subject. The colour ranges from blue to red to indicate time of publication of the subject category, with blue representing earlier publication and red representing a more recent publication. As shown in Figure 6, earlier-published work on ECF in the WoS

database tend to be closely related to issues concerning faculty”, “faculty member”, “program”, and “career”, while in more recent publications, the ECF publications in WoS were more actively related to “early-career academic”, as indicated by “ECA” and “ECAS”.

Figure 7 shows resources in the Scopus database more actively related to “Faculty”, “New faculty”, “program” and “career” for early publications, and “Early career researcher”, “Young researcher” and “Education career” for more recent publications. This finding also revealed that publications in WoS were more focused than Scopus on ECFs.

Publications after the year 2012 focused more on issues related to ECFs preparation towards life in academia, their motivation, and challenges, the support structure for ECFs and strategies to adapt to life as faculty members.

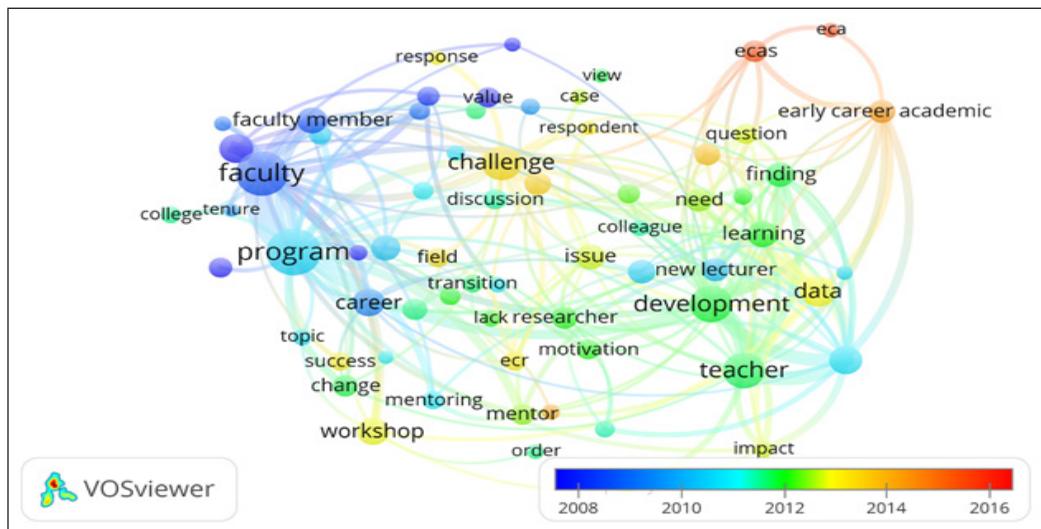


Figure 6. Visualization Map of articles during 1995 – 2017, bibliographic coupling, ECF in WoS

vast Asian region accounting for only 14% of ECF-related research and publication, compared to 33% and 43% from Europe and the USA, respectively; the top 10 most-cited publications originated from western countries. Because cultural factors may differ, review outcomes reported in western countries, essentially generic in nature, may not be applicable to the Asian continent, even though it dominates with respect to knowledge-related trends and can offer concluding insights on this topic as a whole. In other words, potential policies derived from the literature established for ECFs in higher learning institutions must take into account local context and require thorough needs and literature analyses in its support. This highlights the need to encourage publications on ECF-related issues among higher education institutions in other regions, including Asia and South America.

It is important to note that dissemination of ECF-based findings from these other regions may be published in non-WoS or non-Scopus indexed databases, so this study may have underestimated the overall number of publications. Acknowledging this fact, the authors propose that localised research on ECFs that may have been published as non-indexed conference proceedings or on local dissemination platforms be documented, compiled, or written as review papers to be published in the mainstream database. This would create better access to those findings and provide direct input to policy-making with respect to addressing ECF issues.

The results of this study require interpretation within the constraints of several possible limitations. Looking at the WoS and Scopus databases, since the literature documented and reported are dated only from 1993, the overall number may have been underestimated not just because they were locally published and not captured in the databases. Keywords used to identify and categorize publications for analysis also may not comprehensively cover all possible keywords that describe ECFs, and publications using different terms to describe ECFs may have been unintentionally omitted. Given that survey respondents and co-researchers are from the same country and institution, it is possible that ECF terms used in other regions and educational settings may have been unintentionally omitted. However, it is felt that the international and cross-institutional exposure and linkages (worldwide), as well as the educational background of the co-researchers (US, UK, Australia, and the Middle East), are broad enough to mitigate this effect.

The impact of a publication is currently represented through its number of citations, and cooperation based on co-authorship may be useful in identifying and reflecting upon the potential of cross-region influences, making the publication outcome more normalized by region. While complementing bibliometric analysis in the future might show a clearer impact, it may be more accurate to gather the influence of such publications in other non-indexed publications such as institutional guidelines

or national policies and disseminations on other platforms.

Furthermore, it is also highly likely that faculty and ECF-related data are not reported anywhere and remain unanalysed and uncaptured. University personnel or human resource (HR) departments where faculty job applications and career progressions are processed would be cases in point. In addition to salary, hiring, resignation, and termination records, personnel/HR departments may also have in their possession records that document faculty training and development, movement within schools, vacation-day records, conference participation, research leaves, and sabbaticals. Faculty complaints and grievances may also be found in personnel HR files, and some universities may even keep faculty-related medical physiological and psychological records.

In addition to personnel/HR departments, in many universities faculty, professional development centres (PDCs) maintain records related to faculty training and development, and it is likely that ECFs make up a large fraction of faculty who attend training and higher education (HE) postgraduate certification programs at these professional development centres. Within these unreported and possibly unanalysed records reside large quantities of potential data for widening our current knowledge about ECFs. Universities and other stakeholders seeking to gain a more thorough understanding of ECF may in future studies do well to incorporate bibliometric analyses with big data analytics based on non-published records.

Bibliometric analysis of ECF-related publications combined with big data analyses could be useful for informing the bigger picture. ECF-related research and publication can provide descriptions, analyses, critiques, predictions, and suggestions pertaining to ECFs, and the increasing trend of ECF-related publication reflects a healthy concern toward the betterment of young faculty members worldwide. Attention to ECF-related bibliometric analyses and future big data analyses could be highly useful for all stakeholders concerned with nurturing ECF-related talent to make the most of the educational investment they represent. At the very least, bibliometric analyses such as those featured in this paper can offer useful information for better selection, training, mentoring, and support of ECFs.

Notwithstanding the dissemination of ECF-related data and analysis through non-academic platforms and unreported data residing in non-scholarly systems, it is fair to conclude from the publication data in WoS and Scopus that countries and institutions producing scholarly ECF-related outputs are possibly more advanced in their awareness of ECFs trends and issues. While the authors of this study cannot extrapolate the thought that research on ECFs is necessarily related to national policy or organizational practices that support ECFs, its assumption has enough validity to warrant consideration. Momentarily putting aside the uses that such countries and institutions may make of such knowledge, one can argue that higher-education ministries/agencies and

higher-education institutions lacking in ECF-related data within their own spheres of influence could turn to the existing data from other systems and institutions to aid in policy formulation and decision-making. External data also offer a reasonable starting point for discussion of possible issues for investigation and variables for examination as they begin collecting their own ECF-related data.

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Changing the Model of Recognition from Full Incorporation to Co-existence to Strengthen the Customary Court in the State Justice System

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ABSTRACT

The specific goal of this research is to reveal the weaknesses in the model of full incorporation for the recognition of the customary court and to discover a model of recognition for the customary court which is more responsive. The type of research is socio-legal research which uses field data as well as both primary and secondary legal material. The instrument for data collection was a literature review that involved content identification and text analysis. The data analysis used a qualitative method with a hermeneutic interpretation which focused on the synchronization of the legal texts and contexts of the related legislation. The results of the research showed that customary courts had in fact already developed and existed in customary law communities long before the Indonesian nation was born. Ironically, the legal policy contained in Law No. 48 Year 2009 about Judicial Power does not recognize the existence of the customary court, while Law No. 21 Year 2001 about the Special Autonomy of Papua gives only pseudo recognition because it uses a model of full incorporation, which positions it below the state justice system. In order to

strengthen the customary court, this model of recognition should be replaced with a model of co-existence so that institutionally, the authority and decisions of the customary court can exist alongside the state justice system.

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INTRODUCTION

Since former times, the practice of conflict resolution implemented by customary courts has existed across the whole of the Indonesian archipelago (Saptomo, 2010). This practice existed long before the Indonesian nation was formed because empirically, the laws prevailing in Indonesia are not only the legislation made and passed by the power of the state but also customary laws of a local nature. However, it is ironic that the regulations that currently exist in the judicial power system fail to recognize the existence of the customary court. This is a form of neglect or denial of the facts of legal pluralism (Nurjaya, 2011).

It is a fact that the customary court system, which is independent, autonomous, and highly respected, is highly effective for resolving disputes and violations of the law in customary communities. Local wisdom can be empowered in conflict resolution through processes for settling disputes and violations of the law, using informal mechanisms that involve the customary court. The problem faced is that the legal policy in the field of judicial power, which adheres to the principle of centralism and unification of the law, does not acknowledge the customary court in the system of the judicial power of the state. As a result, the customary court will lose and be overruled if it comes into confrontation with the state justice system.

Law No. 48 Year 2009 about Judicial Power, which currently prevails and is based on the pluralistic 1945 Indonesian constitution, does not recognize the

existence of the customary court. The only law that gives recognition to the customary court is Law No. 21 Year 2001 about the Special Autonomy of Papua, although this recognition is inadequate because it follows a model of full incorporation which means that customary courts have a lower status than state courts. The institution of the customary court is positioned below the state, thus the authority of the customary court is extremely limited and the decisions issued by customary courts have little power since they can be annulled by a state court.

Some cases of the cancellation of customary court decisions by state courts in fact actually result in legal uncertainty and can even damage local wisdom. It is a fact that if the customary court system can function effectively, it will reduce the flow of cases to state courts, and for this reason, the existence of the customary court should be strengthened. The customary court system can be strengthened by affirming the recognition of the institution, authority, and decisions of customary courts in the judicial power system.

MATERIAL AND METHOD

This research used the paradigm of legal constructivism, which saw reality as existing in various forms of mental construction, based on social experiences, both local and specific, and depending upon the person involved. The epistemological relationship between the observer and the object is a single entity that is subjective and the result of the combined interaction between the two. Therefore, the primary method

used for this study was hermeneutic and dialectic (Wignjosoebroto, 2002). In line with the paradigm of the research - legal constructivism – the research method chosen is one of socio-legal research with the specifications of a descriptive research study.

The type of legal material used consisted of primary material in the form of binding legislation, and secondary legal material to provide an explanation of the primary legal material, in the form of relevant references (*Dewata & Ahmad, 2010*). *The instruments for data collection were a literature study and interviews* (Creswell, 2008).

The analysis of data and legal material was performed using a qualitative approach with the use of futuristic interpretation and hermeneutic interpretation by focusing on the synchronization of legal texts and contexts from a vertical and horizontal perspective of the related legislation (Hamidi, 2011). A hermeneutic interpretation of law involves the interpretation of legal texts not only in terms of their formal legal aspect based on how the texts read but also in terms of the factors which formed a background to the past (contextualization).

RESULTS

This research tries to raise various issues in the customary courts in the State Justice System. There are two issues raised in this study, namely: (1) Critically describing the various weaknesses in the Full Incorporation Model for Customary Court Admission, and (2) Strategies to Strengthen Indigenous Courts by Changing the Recognition Model

from Full Establishment to Co-Existence. The two problems were then analysed based on available empirical data. The results of the analysis of the first problem are: The current system of judicial power adheres to the legal policy of judicial unification which does not acknowledge or recognize the existence of a judicial body outside the state justice system.

The results of the analysis of the second problem obtained the following results. (1) Recognition of the institution of the customary court needs to be affirmed as an autonomous justice system, (2) Regulation of the recognition of the authority of customary courts should state clearly which kinds of cases come under the authority of the Customary Courts, and (3) Regulation of the recognition of decisions issued by a customary court should state emphatically that such decisions are final. Furthermore, some of the results of this study can be described in the discussion below.

DISCUSSION

The loss of the existence of customary justice is caused by a lack of recognition from the formal court. Some countries that have recognized and applied customary justice include Papua New Guinea. In this country, customary justice coexists with the state justice system, this is done by the way the government creates a harmonization mechanism between the formal and informal justice systems (Team Justice for The Poor World Bank, 2009). The same thing happened in the Philippines through the application of the Local Government Act

of 1978 which combined formal dispute resolution and informal customary justice (The Barangay Justice System) which lived in 42,000 indigenous peoples.

Meanwhile, Fono customary justice institutions still exist in Western Samoa and are recognized in a law called the Village Fono Act (1990). There is a system that is close to the nuances of restotarif based on local wisdom called Ifoga (Maxwell & Hayes, 2006). Customary justice in Bangladesh (Shalish) which is oriented towards the value of restorative justice by referring to community-based methods recognized by the state. In some legal cases, the handling of civil disputes and certain criminal acts is resolved through this informal path (Zulfa, 2013). In Peru, customary justice is very effective in helping to suppress crime because of its decision to use a reconciliation approach so that the state provides regulation and authority to it (Wojkowska, 2006).

Weaknesses in the Model of Full Incorporation for Recognition of the Customary Court

The existence of customary law communities was recognized by the founders of the nation when they compiled the Constitution of the Republic of Indonesia. The close relationship between the state and customary law communities means that philosophically, as the organization that holds the highest power, the Indonesian nation is obliged to recognize these communities, which means protecting, guarding, satisfying, and respecting them. Philosophically, if Indonesia recognizes and

respects the existence of the justice systems that exist in customary law communities, this means that the state has fulfilled the philosophical mandate of humanitarian values, values of togetherness, and values of justice (Sulastriyono, 2015). Pancasila contains religious values (in the first principle), humanitarian values (in the second principle), values of unity (in the third principle), social values (in the fourth principle), and values of justice (in the fifth principle) (Notonagoro, 1994).

The values contained in Pancasila have formed strong roots in the customs, cultures, and lives of Indonesian communities for hundreds of years, becoming a way of life for the Indonesian nation. Diversity should not be understood as differences to be contested but instead should be explored and examined in order to discover the potential, force, or strength of these differences that can be utilized to remain united as Indonesians (Sudjito, 2016). Therefore, a policy of legal pluralism should prevail as a foundation for other legal policies to recognize the unity of customary law communities (Atmaja, 2015).

The policies of the colonial Dutch East Indies Government, which juxtaposed the law of the state (enforced by the State Justice System) with customary law (enforced by the Customary Justice System) through a policy of legal and judicial dualism, can be considered to have been successful (Mahadi, 1991). The colonial government awarded recognition by issuing a number of *Staatblad (Stb)* stating the recognition of the existence of the customary court in various

places in the Dutch Indies (Mertokusumo, 1983).

Unfortunately, the legal policy of recognition of the customary court during the era of the Dutch East Indies did not continue after Indonesian independence (Daniel, 2015) because the legal policies in the laws governing judicial power in Indonesia abolished the recognition of justice and sacrificed customary law.

Since the enforcement of Emergency Law No. 1 Year 1951 about Temporary Measures to Unify the Structures, Powers, and Procedures of the Civil Courts, the existence of the customary court was abolished (*vide*: Article 1 paragraph (2) letter b). The legal policy of unification (Ubbe, 2014), which did not recognize the existence of the customary court, was subsequently followed by other laws pertaining to judicial power, including Law No. 48 Year 2009 about Judicial Power, which states that “All courts in the entire territory of the state of the Republic of Indonesia are state courts provided for under the law”, see: Article 2 paragraph (3). This article reaffirms the legal policy of unification of Law No. 48 Year 2009 about Judicial Power, which does not recognize or acknowledge the existence of judiciary bodies outside the state judiciary system, including customary courts (Bakri, 2015).

Law No. 21 Year 2001 about Special Autonomy for the Papua Province is an exception because it awards recognition to the customary court for customary law communities in the Papua Province, as regulated in Article 50 and Article 51

paragraph (2), which states: Aside from the judicial power of the state, the existence of the customary court is recognized in certain customary law communities. Article 51, meanwhile, reads in full as follows:

1. Customary courts are courts of reconciliation within the customary law community, which have the authority to examine and adjudicate civil disputes and criminal cases among members of the customary law community concerned.
2. Customary courts are formed under the provisions of the customary laws of the customary law community concerned.
3. Customary courts examine and adjudicate civil disputes and criminal cases as stated above in paragraph (1) based on the laws of the customary law community concerned.
4. In the case that one of the parties involved in a civil dispute or criminal case objects to the decision made by the customary court examining the case as stated in paragraph (3), the objecting party has the right to ask a court of first instance in the area of jurisdiction concerned to re-examine and retry the dispute or case concerned.
5. Customary courts do not have the authority to issue a sentence of imprisonment or confinement.
6. The decision of a customary court about a criminal offence which is not requested to be re-examined as

stated in paragraph (4) is the final decision and legally binding.

7. In order to free a criminal from criminal charges according to the rule of criminal law that prevails, a statement of approval is required from the Chairman of the State Court in the vicinity concerned, obtained through the Head of the State Prosecutor's Office in the place where the criminal act was committed, as stated in paragraph (3).
8. In the case that the request for a statement of approval to be given in connection with the decision of a customary court, as stated in paragraph (7), is rejected by the State Court, the decision of the customary court as stated in paragraph (6) becomes legal consideration for the State Court in reaching a decision about the case concerned.

This legal policy, which recognizes the customary court, is a sign of progress because it replaces the previous legal policy that did not recognize, or in fact ignored, the existence of the customary court, and therefore it deserves to be noted as a dramatic change (Smith & Angie, 2014). Nevertheless, the legal policy which recognizes the customary court in the Law on Special Autonomy in Papua needs to be reviewed because it is not yet responsive to the needs of customary law communities. This is what is known as a model of full

incorporation. This model of recognition of the customary court has a number of weaknesses, as follows:

First, as an institution, the customary court is positioned below, or subordinate to, the institution of the state court, which means that it is neither autonomous or independent and all decisions made by a customary court can be annulled by a state court that re-examines and retries the dispute or case concerned, as stated in Article 51 paragraph (4). This stipulation is inconsistent with the section entitled "Explanation of Law on Special Autonomy in Papua, Number I General, Basic matters contained in the constitution, Number Two", which states the spirit of autonomy contained in the Law on Special Autonomy in Papua, which amongst others aims to recognize the existence of and empower customary law communities in Papua. Meanwhile, it is a fact that in customary law communities in Papua, settlements by customary courts are regarded as being fairer than settlements made by state courts (Reumi, 2015).

Second, the legal policy on the recognition of the authority of the customary court in the Law on Special Autonomy in Papua contains ambiguity and obscurity of norms. In Article 51 paragraph (1), the phrase "authority to examine and adjudicate civil disputes and criminal cases" does not state explicitly the kinds of criminal cases it refers to, whether it includes cases that have an equivalent in positive law (the Criminal Procedure Code – KUHAP) or only cases

that are purely of a customary nature (and have no equivalent in positive law), and whether the authority is absolute or relative. There are no clear boundaries of authority here between the customary court and state courts. In customary law communities, customary courts only have the authority to receive, examine, and adjudicate “cases according to the customary laws” to which they refer (Sumule, 2014).

Third, the legal policy on recognition of a decision made by a customary court contains an internal conflict of norms. On one hand, Article 51 paragraph (2) states that: “(2) Customary courts are formed under the provisions of the customary laws of the customary law community concerned”, but Article 51 paragraph (4) emphasizes that the decision of a customary court can be submitted for re-examination and retrial (a law of appeal) to a state court, in which the settlement uses the logic of state law (positive law), thus creating the potential for a violation of human rights. This is also inconsistent with the goals of recognition of the customary court, as stated in the Explanation of Article 51 paragraph (2), which reads:

“By recognizing the customary court in this Law, there will be many civil disputes and criminal cases between members of customary law communities in Papua which can be resolved *completely* by the people involved *without involving* a court in the sphere of *state justice*”.

Strengthening the Customary Court by Changing the Model of Recognition from Full Incorporation to Co-Existence

Theoretically, there are three models that can be implemented for a state’s recognition of informal courts (customary courts), namely Abolition, Full Incorporation, and Co-existence (Wojkowska, 2006). First, a model of Abolition is when a country insists on the uniformity or unification of the law and abolishes any non-state justice systems (the customary court). In the state legislation, it clearly states that the customary court system is abolished (Connolly, 2005). Second, a model of Full Incorporation is when an informal (customary) justice system is given a formal role in the country’s justice system and becomes a (subordinate) part of the state justice system. The merging of two different justice systems is unnatural and difficult to realize because each legal system has its own different mechanisms, logic, and paradigms for resolving cases (Tanya, 2010). Third, the model of Co-existence is the independent existence of an informal justice system within the formal structure of the state, in which the state has very limited involvement in its supervision or control.

The recognition of the customary court in Law No. 21 Year 2001 about Special Autonomy for the Papua Province shows more of the characteristics of the model of full incorporation, similar to the model of the Barangay Justice System (BJS) used in the Philippines (Team Justice for the Poor World Bank, 2009). This is because there is

no clear division of authority between state courts and customary courts, and customary courts are subordinate to state courts, since all decisions, without exception, can be submitted for re-examination and retrial in a state court by an objecting party. The customary court is positioned as a low court in the state justice system, and when retrying a case, the state court uses formal laws that are founded on a different philosophy and have different standards of values from customary law.

It is the writer's view that in order to strengthen the customary court within the judicial power system, in the future the political model of recognition of the customary court should adopt a model of co-existence. In this type of model, there are two justice systems that have different jurisdictions, namely the state court with general jurisdiction and the customary court with jurisdiction limited to cases that arise within the sphere of customary law. Informal courts can exist alongside the formal state justice system without having to combine the structure of the two.

Authority is divided between the two, as long as the boundaries are clear because it is not possible for the jurisdiction of the two to overlap. This model is used in Peru, which implements regulations that allow customary courts to operate formally albeit with certain restrictions. Although the two systems are separate, at the request of one or both parties, the decision of a customary court can be registered in an

official community registry book at the state court in order to obtain a written record (Team Justice for the Poor World Bank, 2009).

If the recognition of the customary court is changed from a model of full incorporation to a model of co-existence, the implications will be to strengthen the customary court system, as long as it is accompanied by a revision of Law No. 21 Year 2001 about the Special Autonomy of the Papua Province, with specific reference to the following three points.

First, recognition of the institution of the customary court needs to be more clearly defined, namely as a justice system that exists outside the state system and functions as a court of non-litigation, whereby the two systems exist alongside one another and strengthen one another (co-existence). Affirmation of the customary court as a non-state justice system is needed in order to define the meaning of the customary court as a community justice system that is separate from the state justice system, which has independence and autonomy based on the theory of the autonomy of unity of the customary law community. This kind of recognition of the institution of the customary court also has a philosophical foothold in the values of Pancasila, as the national principle of the state, especially in values of humanity and values of social justice (Lembaga Ketahanan Nasional [Lemhanas], 2016), as well as a theoretical foothold in the theory of legal pluralism

which refers to a situation in which two or more legal systems interact (Hooker, 1975). With this affirmation, the recognition of the institution of the customary court will not only be a pseudo recognition but will become a full and genuine form of recognition (Nurjaya, 2011).

The writer believes that the institution of the customary court should be given a status that is equal to that of the state court, as a “court of non-litigation” or an institution for “non-litigation adjudication”, in accordance with the nature of the customary court as a community justice system. As an institution of “non-litigation adjudication”, a customary court is able to settle customary disputes through a process of adjudication outside a state court in which the decision made has the same power as a decision made by a state court.

Second, the regulation of recognition of the authority of the customary court must state clearly which cases fall under its authority and which cases are under the authority of the state justice system. In order to identify the boundaries between the authority of the customary court and state court in trying a particular case (the object), a distinction needs to be made between customary cases that fall into the category of customary disputes (civil cases) and customary cases that fall into the category of customary violations of customary offences (including the domain of criminal law). Cases of violation of customary law can be divided further into two categories, namely those that are pure customary violations

and those that are compound customary violations, or which some people refer to as double criminality (Huda, 2013).

Pure customary violations are actions that violate customary law but cannot be classed as criminal acts according to positive law, or of which there is no equivalent in the Criminal Code (KUHP), and which involve members of the customary law community concerned. This kind of case should naturally be under the absolute authority or competency of the customary court. This means the case is under the complete authority of the customary court and cannot be taken to a state court to be tried. This view is in line with the opinion of Suparta Jaya SH., MH. from the Prosecutor’s Office in Papua, who states that “in a customary case, if it is not regulated in the Criminal Code, the customary decision is the final decision which cannot be re-examined by a state court (Tim Kemitraan 2008).

The consequence of this is that criminal cases that are under the complete authority of the customary court include only (purely) customary violations or crimes that are not regulated by and do not have an equivalent in positive law, such as: customary cases involving moral offences (love relationships, consensual sexual relations, broken marriage vows, adultery, incest, cohabitation); customary cases involving material wealth (theft or damage of customary objects); customary cases involving violation of personal interests (swearing, lying); customary cases involving negligence (failure to perform

customary obligations, failure to take part in traditional ceremonies, failure to attend meetings, failure to pay contributions); customary cases involving land, as long as they are connected with communal land rights; customary cases involving the adoption of an illicit child without a traditional ceremony (Tim Kepolisian Daerah Papua - Fakultas Hukum Uncen - Partnership for Governance Reform In Indonesia, 2005).

Cases of compound customary violations, or double criminality, are acts of customary violation which are also criminal acts according to positive law or of which there is an equivalent in the Criminal Code. In such a case, the customary court should only have limited authority, namely to try the customary violation, while the act that is considered criminal according to positive law (Criminal Code) should be tried by a state court.

In order to strengthen the existence of the customary court in the judicial power system, customary courts should be given the authority to try minor criminal cases or cases of less severity with a penalty of up to 5 (five) years imprisonment. Thus, all cases of customary violation, whether purely a violation of customary law or a case of double criminality or a violation of customary law which has an equivalent in the Criminal Code with a maximum penalty of 5 (five) years imprisonment are under the authority of the customary court and the decision is final. The customary court will implement its authority through

a mechanism of penal mediation as the mechanism to settle a criminal case (Arief, 2012). The authority of the customary court to try a case other than a case involving a severe criminal act also overrides the authority of the state to prosecute, except in the event that a customary court fails to implement its authority.

For customary violations that have an equivalent in the Criminal Code, with a penalty of more than 5 (five) years imprisonment, or major criminal acts, customary courts should only have the authority to try the case in the domain of the violation of customary law and customary sanctions, and subsequently, the decision made by the customary court may be taken into consideration by the judge of a state court when issuing a verdict (Tim Kemitraan 2008). The sanction or sentence imposed by the customary court is limited to a customary reaction which may not contravene human rights, and in general takes the form of immaterial compensation, paying a customary fine, holding a ceremonial meal (*selamatan*), concealing the result of the shameful act, or apologizing (Wiranata, 2005).

The regulation about the co-existence of the authority of the customary court and the state court in the future is summarized and explained in Table 1.

Third, if the recognition of the customary court follows a model of co-existence, the regulations concerning the recognition of decisions made by the customary courts should state emphatically that such decisions

Table 1

Authority to try customary cases by customary courts and state courts

	Customary Case	Customary Court	State Court
1	Customary case in the form of a dispute	Absolute Authority	No authority
2	Customary case in the form of a pure violation of customary law.	Absolute Authority	No authority
3	Customary case in the form of a violation of customary law which is also a criminal offence according to positive law with a maximum prison sentence of 5 (five) years.	Authority to try the case, overriding the right of the state to prosecute.	Authority to try the case in accordance with the criminal act outlined in the Criminal Code, if the customary court fails to implement its authority.
4	Customary case in the form of a violation of customary law which is also a criminal offence according to positive law with a minimum prison sentence of 5 (five) years.	Authority to try the case limited to the aspect of violation of customary law with the sanction based on customary law.	Authority to try the case in accordance with the criminal act outlined in the Criminal Code. The decision made by the customary court may be taken into consideration to reduce the sentence.

are final, and there is no opportunity to submit a request for re-examination and retrial by a state court as long as there has been no violation of human rights and as long as the customary case is not also classed as a major criminal case according to positive law. This reasoning can be juxtaposed with the wishes of customary law communities in Papua, as stated in the Cultural Decision issued by the People's Assembly of Papua (MRP) Number III/KK-MRP/2009 about the Special Policy for Alignment, Protection, and Empowerment of the Indigenous People of Papua, which in Article 36, Chapter III, Section seven, Paragraph 2 about the Customary Court states: "Cases and or disputes that have already been adjudicated by customary

courts cannot be submitted for retrial by a state judicial body as long as there has been no violation of human rights" (Secretariat of the People's Assembly of Papua: 2009).

If the model of recognition of the customary court is one of co-existence, this means that it enforces the principle that the decision issued by a customary court is final, based on the basic value of upholding the supremacy of the law by implementing the principle of legal certainty to a maximum level in accordance with the mandate of the constitution (Upara, 2011). In addition, a judicial decision that is final is an implementation of the principle of justice in a manner that is simple, quick, and at a low cost, as stated in Article 4 paragraph (2) of Law No. 48 Year 2009 about Judicial

Power, and in the General Explanation, number 3 letter e Law No. 8 Year 1981 about the Criminal Procedure Code (KUHP).

From the perspective of a customary law community, a decision made by the court, which is a customary sanction imposed on the person who committed the customary violation, is not only intended to create a balance in social relations and harmony with nature but also to give legal certainty to the person on whom the sanction is imposed because he or she has been tried in accordance with the degree of his or her offence based on the customary law that prevails in the customary community concerned. This also applies to the family of the victim and the surrounding community who benefit from the actions of the person concerned.

The nature of a customary court decision which is final is also founded essentially on the principle that the execution of the decision issued by a customary court is carried out immediately after the decision has been made and executed by the customary judge involved in the trial. The execution of a decision issued by a customary court which is in the form of a customary fine in favour of the victim may either be paid directly to the victim or through the customary judge. In certain cases, it may not be possible for the fine to be paid directly in the form of cash in which case it is paid over a period of time, the duration of which is determined by the judge, taking into consideration the financial situation of the offender (Tim Kopolisian Daerah Papua-Fakultas Hukum

Uncen-Partnership for Governance Reform In Indonesia, 2005).

Overruling the decision of a customary court and holding a retrial in a state court for a case that has already been adjudicated is a violation of the legal principle *nebis in idem*, which is universal, and also a violation of human rights that should be protected by the state. In a country ruled by the law which upholds the supremacy of the law, the state provides legal protection to all its citizens by making legal certainty a principle for law enforcement in accordance with the mandate of the constitution of Indonesia, as stated in Article 28 D paragraph (1) of the 1945 Constitution of the Republic of Indonesia which reads: "Every person has the right to fair recognition, security, protection, and legal certainty and to be treated with equality before the law", and all the stipulations of its derivation contained in Law No. 39 Year 1999 about Human Rights.

More specifically, the provisions that regulate the re-examination and retrial of a decision issued by a customary court in a state court, where the settlement uses the logic of state law, are contradictory with the law on Human Rights. Article 6 paragraph (1) of Law No. 39 Year 1999 about Human Rights states: "In order to uphold human rights, the differences and needs of customary law communities should be addressed and protected by the law, by society, and by the Government." Furthermore, in the explanation of this article, it states that the customary rights which prevail and are upheld by a customary law community

must be respected and protected in order to provide protection and enforcement of human rights in the community concerned while paying attention to the prevailing laws and legislation. Meanwhile, Article 18 (5) of Law No. 39 Year 1999 about Human Rights states: “No-one can be prosecuted a second time in the same case for an action which has already been given a court decision that is legally binding.” Thus, the acknowledgement that a decision issued by a customary court is final is a form of respect for human rights in the interest of upholding legal certainty.

The principle that the decision issued by a customary court is final, in fact, rests ontologically on the theory of human rights and the unity of customary law communities (Ad Hoc Committee I DPD RI [2009]) whereby customary law communities have the authority to implement their own justice system (*zelfrechtspraak*). This authority is the logical consequence of the authority of

the community to create its own laws and also its authority to enforce these laws. The authority to hold a trial is evident in the existence of the customary court which is manifested through discussions held in the customary community to resolve problems that occur in the vicinity of the customary law community concerned. In addition, by nature, a customary court is not a court consisting of different levels but rather a single judicial institution that belongs to the customary law community.

The spirit that underlines the desire to reinforce the final nature of a decision issued by a customary court is really an endeavor to enforce the authority of the customary court, which in the past has not been recognized by the state. If a customary court’s decision is final, the customary court will no longer be considered subordinate to the state court (as in a model of full incorporation), since both have their own place and jurisdiction with all the strengths and weaknesses that

Table 2

Nature of decision issued by a customary court in accordance with its authority to try a case

	Type of Customary Case	Authority to Adjudicate	Nature of Decision
1	A Customary case in the form of a dispute.	Absolute	Final
2	A Customary case in the form of a (pure) customary violation.	Absolute	Final
3	A customary case which is a customary violation and also a criminal case according to positive law with a maximum penalty of less than 5 (five) years.	Authority to adjudicate, overriding the right of the state to prosecute.	Final

Table 2 (Continued)

	Type of Customary Case	Authority to Adjudicate	Nature of Decision
4	A customary case which is a customary violation and also a criminal case according to positive law with a maximum penalty of more than 5 (five) years.	Authority to try limited to the aspect of violation of customary law with sanctions based on customary law.	Final as far as the customary law violation is concerned and may be taken into consideration to reduce the sentence issued by a judge in a state court. If the person committing the violation has already come to a peaceful agreement with the victim's family, it is possible that the police may use their discretion to not carry out an investigation.

they possess (co-existence). The final nature of a decision issued by a customary court in accordance with its authority to hold a trial can be seen in Table 2.

CONCLUSION

The current system of judicial power adheres to the legal policy of judicial unification which does not acknowledge or recognize the existence of a judicial body outside the state justice system. Law No. 21 Year 2001 about Special Autonomy of the Papua Province recognizes the customary court using a model of full incorporation which places it beneath or subordinate to the state justice system.

The strengthening of the customary court is only possible if the model of recognition of the customary court is changed from a model of full incorporation to a model of co-existence. The co-existence model of recognition requires the revision of three points.

1. Recognition of the institution of the customary court needs to be

affirmed as an autonomous justice system which exists outside but alongside the state justice system in a form of co-existence.

2. Regulation of the recognition of the authority of customary courts should state clearly which kinds of the case come under the authority of the customary courts.
3. Regulation of the recognition of decisions issued by a customary court should state emphatically that such decisions are final, and there is no possibility of submitting a request for re-examination and retrial in a state court, as long as there has been no violation of human rights.

A model of co-existence for the recognition of the customary court will strengthen the existence of the customary court so that it is able to exist alongside the state justice system without merging the two structures and with each maintaining its own jurisdiction.

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A Legal Perspective on the Right to Education for Stateless Children in Selected ASEAN Countries

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ABSTRACT

Statelessness has a devastating impact on stateless children globally. Despite having international laws to protect human rights, the rights of stateless children are still at stake. Although the right to education is a fundamental universal right of all children as per Article 28 of the United Nations Convention on the Rights of the Child (CRC) and the ASEAN countries are signatory members of CRC, many stateless children within the region are still denied access to education. They suffer negative impacts due to denial of the right to education with no opportunities for further studies and employment, which eventually lead them to poverty. Thus, in this article, the stateless children's right to education of selected ASEAN countries is analysed from a legal perspective based on a qualitative doctrinal research method involving the United Nations' statistical reports, legislations and relevant laws/ policies of the said countries. The findings of this article establish that the inadequacy in national laws and the absence of birth registration denies stateless children to have the right to education in accordance with Article 28 of CRC. Hence, this research provides feasible proposals from a legal perspective to ASEAN countries to uphold the right to education for stateless children.

Keywords: ASEAN countries, CRC, stateless children, right to education

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INTRODUCTION

According to Article 1 of the 1954 Convention Relating to the Status of Stateless Persons, the legal definition for stateless persons is "individuals who are not considered citizens or nationals under the operation of the laws of any country" (The United Nations High Commissioner for

Refugees [UNHCR], 1954). Statelessness is a condition that condemns millions of people and children into a devastating livelihood (Leclerc & Colville, 2007). The protection and human rights of stateless people may not be made available for many who seek asylum or refuge away from their homeland. Although international laws and treaties provide protection of human rights, children of stateless people often become vulnerable victims who fall prey to discrimination and oppression due to statelessness. The Right to Education (RTE) is a fundamental universal right for all children, as stipulated in Article 28 of the United Nations Convention on the Rights of the Child (CRC) (UNHCR, 1989). Despite the fact that ASEAN countries are signatory members of CRC, many stateless children within the region are still denied access to education, even at the primary school level as they face various challenges to be enrolled in government schools or colleges.

The denial of access to education and the non-availability of RTE creates a devastating impact on the stateless children. The United Nations' reports and research findings prove that statelessness shoves children into a perpetuated lifetime of marginalization across generations, often denied education or falling prey to vulnerability, crime, and vice. A stateless child has no national identification and becomes almost non-existent within the domicile country. Therefore, there is no protection or welfare provided by national law. Disappearance, exploitation, kidnapping, trafficking are among the

major risks faced by stateless children at all times. Hence, birth registration is a vital tool for any child, a fundamental legal identity to acquire the right to nationality and legal protection under any national law (Allerton, 2014). In Malaysia for instance, by virtue of Articles 14-22, Part I, II and III of the Second Schedule of the Federal Constitution and Rule 28 of the Citizenship Rules 1964 (Amendment 1996), a birth certificate of a child and the parent are prerequisite for an application of citizenship and its confirmation (National Registration Department of Malaysia, 2019).

The findings by the Institute on Statelessness and Inclusion (Waas & Chickera, 2017) discovered that one-third of 15 million stateless people are children without nationality. Every ten minutes, a child is born stateless (Waas & Chickera, 2017).

The United Nations High Commissioner for Refugees (UNHCR) has stated that the definition of stateless persons under domestic laws must be given due consideration (UNHCR, 2010). One needs to look at this issue in-depth and beyond the content of the relevant nationality laws of a state. The interpretation and application of legal provisions vary according to different states and the matter is handled on a case-by-case basis. Therefore, the executives, legislative and the courts ought to work together in construing the definition of stateless persons within the domestic and international laws to ensure adherence to the principles of human rights in serving justice for the stateless persons.

A stateless person may not be necessary without a state. There are stateless persons who may also be undocumented, hold an irregular immigration status or qualify for protection as a refugee. Therefore, the international definition of a stateless person needs to be interpreted in line with the domestic nationality law, in applying the definition of statelessness in practice and to determine if a person is considered as a national by any state under the operation of its law. The fact that a stateless person's circumstances can also be characterized by the use of other terms has no bearing on the finding of statelessness (UNHCR, 2010).

Historically there are two categories of (i) the De Jure Statelessness and (ii) the De Facto Statelessness (United Nations, 1949). The De Jure Statelessness refers to persons who are not nationals of any State, either because at birth or subsequently they were not given any nationality, or because during their lifetime they lost their own nationality and did not acquire a new one (United Nations, 1949). Meanwhile, stateless persons de facto are persons who, having left the country of which they were nationals, no longer enjoy the protection and assistance of their national authorities, either because these authorities refuse to grant them assistance and protection, or because they themselves renounce the assistance and protection of the countries of which they are nationals (United Nations, 1949).

The definition of De Jure statelessness is found in Article 1(1) of the 1954 Convention relating to the Status of Stateless Persons (Hugh, 2010). Although in law the status

of stateless persons De Facto differs appreciably from that of stateless persons De Jure, in practice it is similar (United Nations, 1949). The plight of De Jure and De Facto stateless persons are the same within the context of human rights. Therefore, nations often refer to the global definition of Article 1(1) of the 1954 Convention relating to the Status of Stateless Persons in addressing issues for stateless persons and children.

However, the categorization of a stateless person may overlap with that of an undocumented, irregular migrant, asylum seekers or refugees. Thus, a stateless person's circumstances may not fall within the confines of the definition under international law. Hence it should encompass other categories of people who can become stateless due to different circumstances.

The objective of this study is to analyze the right to education (RTE) for stateless children in the ASEAN region from a legal perspective. The UNHCR reports and many researchers ascertain that the deprived condition of stateless children is mainly due to the absence of citizenship. This paper aims to establish findings to address the problem statement and propose feasible recommendations to enable ASEAN Member States (AMS) to strengthen their role in upholding accountability in protecting the stateless children by providing RTE.

The scope of this study is confined to a selected number of ASEAN countries that reveal significant changes, improvisation in domestic laws or policies to provide RTE for stateless children. Several other AMS

are not covered extensively due to overlaps in some aspects such as intergovernmental joint efforts between counterpart countries, non-availability of RTE and the relevant domestic laws for stateless children. The UNHCR and scholarly research findings confirm the insurmountable problems and challenges faced by stateless children in ASEAN countries. Their fundamental human rights such as the right to nationality, health care, and education are often neglected or denied (Allerton, 2014; Lumayag, 2016; Petcharamesree, 2015; Waas & Chickera, 2017).

This research elucidates the causes of statelessness and the status of RTE among stateless children within the ASEAN region. The causes of statelessness keep evolving in time and vary across regions. Gaps or conflicts in nationality laws are one of the key causes of statelessness, often preventing children from realizing their right to a nationality (UNHCR, 2016). A classic example is usually the discrepancy between the laws of the state where the person is born and that of the parents' nationality. Gender discrimination in nationality laws often condemns a child to statelessness, as in the case when either parent is unable to pass on their nationality to the child, especially if the child is born out of wedlock, or the father is a foreigner or stateless himself. Irregular migration and the failure to register births are a prevalent cause of statelessness across regions (Conklin, 2014). Insufficient or lack of birth documents, difficulties in acquiring such documentations become a great hurdle

for them to prove their eligibility to apply for citizenship as per the national laws (UNHCR, 2016).

However, the ASEAN region has a peculiar challenge, the lack of a unified definition of statelessness in domestic laws. Although the 1954 Convention provides the legal definition, the ASEAN member countries still fail to ratify or implement the definition of statelessness within their national laws and policies effectively. One best example is the Philippines, the first state in Asia to enact a statelessness determination procedure and protection framework for stateless persons by adopting the Department Circular No. 58 on Establishing the Refugee and Stateless Status Determination Procedure in 2012. However, the law is still subjected to procedural issues that can be improvised (Wass, 2012). Similarly, Vietnam and Laos provide a definition for stateless persons but lack in implementing protections (Caster, 2016).

Conversely, Myanmar's 1982 Citizenship Law which establishes one of the main criteria for granting Burmese citizenship on the concept of "national races," defined as those who settled in the Burmese territory in 1823, a year before the beginning of the British colonial era. The International Court of Justice (ICJ), deems the said law to be irreconcilable with core rule of law principles and the State's obligations under international human rights law, rendering it discriminative against various ethnic minority groups particularly

the Rohingyas (Efe-epa, 2019). Moreover, the refusal to implement the accepted international definition in Myanmar caused statelessness among the Rohingyas who had to seek refuge in other nearby ASEAN countries such as Thailand, Malaysia and Indonesia (Caster, 2016).

Notably, technical flaws in national laws can also contribute to statelessness (UNHCR, 2011a). In applying for a new nationality, the applicant is required to renounce his/her original nationality. While awaiting the approval, the applicant has an uncertain status as a renunciation of original nationality takes effect. In such instances, there are no grounds for naturalization or protection for the applicant. This naturalization process by itself can cause difficulties and create a risk of statelessness, especially by virtue of poorly drafted domestic laws with technical flaws that do not cater to protection mechanisms pertaining to nationality. In addition to this, political upheaval is a considerable factor as state succession can leave people without nationality, for example when the original state of nationality dissolves, it may render a person stateless without the nationality of the new state (UNHCR, 2011a).

Statelessness has negative effects on the status of RTE for stateless children within the ASEAN region. Although there are obligations and accountability for signatory countries to ensure the children's rights are protected as per CRC, many stateless children in ASEAN are yet to acquire RTE. Despite accepting international obligations to uphold the rights of children by ratifying

CRC, some are yet to ratify other related, important international legal instruments, for example, all AMS are signatory to CRC but only several choose to accede to the International Covenant on Civil and Political Rights (ICCPR) (The Office of the High Commissioner for Human Rights [OHCHR], 1976), namely Cambodia, Indonesia, Lao, Thailand, the Philippines, and Vietnam. The others have not ratified the ICCPR to date.

Both CRC and ICCPR emphasize the importance of birth registration and the right to acquire a nationality, as well as RTE for all children within the territory of state parties. However, stateless children in the ASEAN region are not likely to have RTE, often due to the absence of birth registration documents and nationality. The United Nations (UN) and its Special Rapporteur on RTE noted this as a serious problem that needs to be addressed accordingly by AMS. Hence, the factors of statelessness and RTE for stateless children within the ASEAN region ought to be scrutinized by every AMS, particularly by the ASEAN Intergovernmental Commission on Human Rights (AICHR) to render necessary legislative protection for them.

METHOD

A qualitative doctrinal research method based on a number of scholarly research journals, reports and analyses contributed by the United Nations, ASEAN, the governments of AMS, Non-Governmental Organizations (NGOs, at the international and national levels) contributed towards

this research. A comparative analysis of the laws and policies within the domestic legal framework of selected ASEAN countries pertaining to the right to education for the stateless children were analyzed in line with CRC and other related international legal instruments. Some ethnography and field research findings from the researchers were also included to provide a sufficient understanding of the status of stateless children within the ASEAN region.

FINDINGS

The consequences of stateless children begin before their birth. Stateless pregnant women frequently face inadequate pre-natal and post-natal care. Hence, their infants and children become stateless, do not receive adequate immunizations and proper essential medical care, and this is a serious compromise with regard to their right to health. As the children grow up, they are often denied access to primary education due to the lack of birth registration documents, which are practically a prerequisite for registration in schools and a requirement under all national laws. Similarly, in most countries around the world, stateless children do not have access to secondary education.

Denial and inaccessibility to RTE create a negative impact on stateless children. The children face a greater likelihood of restricted freedom of movement, arbitrary deportations, social exclusion, and vulnerability to trafficking, exploitation, exposure to criminality, juvenile delinquency, drug addiction, and even

terrorism. Their potential will be curbed due to the denial of further studies. They often live in perpetuated poverty as a result of unemployment and lack of economic opportunities.

Denial or limited access to education is discrimination and violation of human rights for children. The protection of children under the international treaty law was primarily established in the Declaration of the Rights of the Child adopted by the League of Nations in 1924, developed in time and became CRC in 1989. Article 28 of CRC and other related international treaty laws such the UN International Covenant on Civil and Political Rights (ICCPR) 1966, the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) 1979, the Convention on the Rights of Persons with Disabilities (CRPD) 2006, Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (1984), the African Charter on the Rights and Welfare of the Child (ACRWC) 1990, Article 3(3) of the Treaty on European Union (2007), clearly lay out the rights for children that should be upheld by every country at all times. Many signatory countries of CRC face this problem due to the influx of migrants from other countries (UNHCR, 2015). Almost all scholarly journals, the United Nations' reports, and expert research findings have highlighted the detrimental impact of statelessness and the non-availability of RTE on stateless children. Hence, the UN and ASEAN have jointly embarked on legislative and judiciary reformations to protect the rights

of stateless children. However, in reality, stateless children in many ASEAN countries are still being denied of RTE. The following are the research findings in selected AMS pertaining to RTE for stateless children.

Cambodia, Lao PDR and Vietnam

In Cambodia, three particular groups who are at risk of statelessness are some Vietnamese communities with long histories in Cambodia, Khmer Krom, and refugees. Numerous stateless children in Cambodia are out of school children (OOSC). The EAC-UNESCO Strengthening Education Systems for Out of School Children project (Educate A Child, 2014b) seeks to aid Cambodia in enrolling and retaining OOSC in quality primary education programs, as the nation is utilizing its internal resources for education. There is not much legal recognition for stateless people and children in Cambodia. However, the international community continues to render assistance to stateless children with some cooperation from the local community and government (Duoos & Morrow, 2013).

On the other hand, the education system in Lao PDR is slowly progressing despite the difficulties and constraints such as poorly paid teachers, insufficient funding and often ineffective allocation of the limited resources available. The UN and Aide et Action (AEA), an international NGO is actively engaged in improving the education of the people in Laos, by promoting access to school for the disadvantaged, improving the quality of primary education as well

as supporting and encouraging education programs for children migrant, who are stateless and geographically inaccessible (Educate A Child, 2014b).

Despite financial constraints and challenges, Lao PDR provides legal recognition to stateless people and children within its region. Decree of the President of the Lao People's Democratic Republic on the Promulgation of the Law on Lao Nationality, No. 35/PO 2004 details the definition and right to acquire nationality for stateless people and children in order to reduce statelessness. The law also renders opportunities for stateless people and children to enjoy ensuing rights upon acquiring Lao nationality. Article 7 Law on Lao Nationality 2004 provides a definition of a stateless person: an apatrid [stateless person] is "an individual residing in the territory of the Lao People's Democratic Republic who is not a Lao citizen and who is unable to certify his nationality". This definition provides a clear characterization of a stateless person in which the statelessness of a person can be recognized by law only if that person is residing in Lao PDR. The definition is very pragmatic since it refers to people who are unable to certify their nationality. This could remove the burden of proof, in practice, for people seeking to be recognized as stateless, thus facilitating them to access other ensuing rights, provided they fall within the ambit of Article 7, Law on Lao Nationality 2004 (UNHCR, 2010).

The Law on Lao Nationality includes provisions that can prevent the risk of statelessness amongst children born in Laos.

This is reflected in Articles 12 and 13 which state, “Children found in the territory of the Lao People’s Democratic Republic and whose parents’ identity is unknown will be considered Lao citizens” (Decree of the President of the Lao People’s Democratic Republic on the Promulgation of the Law on Lao Nationality, No. 35/PO 2004).

Conversely, Article 14 of the law may confer restriction and difficulty to apatride or stateless parents in seeking nationality. The stateless person or parent must fulfill all conditions prescribed by Article 14 in applying for the Lao nationality, failure of which the application can be declined. In addition, the determination of nationality of a stateless person or parent is subjected to the Standing Committee of the National Assembly of the Lao PDR’s approval, convened annually in accordance with each year’s quota (Article 27, Law on Lao Nationality 2004). The uncertainty in any stateless parent’s application for nationality would jeopardize the rights of their children. If the parents fail to acquire a nationality, this will automatically limit their children’s chances of acquiring nationality and other ensuing rights such as the right to health care and education.

Regardless of whether the status of parents of stateless children is recognized or not, Article 13 of the Law on Lao Nationality construes that the conferment of nationality to a stateless child is only viable upon registration at birth, for the child must be recognized as a stateless child residing within the region (UNHCR, 2014).

In Laos, birth registration and documentation are still important basic requirements for a stateless child, be it to acquire nationality or to be enrolled in a government school. In the absence of birth registration, RTE is still not regarded as a right for stateless children. There seems to be an absence within the domestic law of Lao PDR to recognize RTE as a fundamental right for stateless children, regardless of their nationality and birth registration. Hence, RTE for stateless children in Lao PDR is still in limbo (UNHCR, 2014).

As for Vietnam, UNHCR commends the country for codifying a definition of a “stateless person” in Article 3(2) of Law on Vietnamese Nationality 2008, which is generally consistent with the definition found in the 1954 Convention on the Status of Stateless Persons. Vietnam’s adoption of a clear, legal definition of statelessness is complemented by related provisions establishing that stateless persons and foreigners may apply for naturalization upon completion of at least five years of permanent residence in the country and fulfilment of prescribed requirements. The establishment of domestic laws and procedures for stateless persons to acquire nationality in Vietnam prevent children and their successive generations from inheriting statelessness despite being born to stateless parents (UNHCR, 2011b).

Vietnam has recognized rights for stateless children in line with CRC by adopting Decree No. 158/2005/ND-CP on Civil Status Registration and Management

2005 which entitles all children born in Vietnam to birth registration, free of charge and regardless of their status, whether citizens or non-citizens. The law permits the birth registration of children born abroad to Vietnam parents upon their return to the homeland. The Decree is supplemented by the Civil Code and the Law on Protection, Care and Education for Children, as the main legislative instrument, which complies with CRC (UNHCR, 2011b).

Vietnam also embarked to protect the rights of stateless people and children by enacting provisions of Law on Vietnamese Nationality 2008. Article 8 and Article 17 of the law aim to create conditions and opportunities to provide nationality to stateless children born in Vietnam regardless of their status and parents' identification. Even abandoned newborns and children found in Vietnam whose parents are unknown, automatically acquire Vietnamese nationality by virtue of Article 18. With birth registration, stateless children in Vietnam born to former Cambodian refugees (and stateless) parents as well as thousands of Vietnamese women who became stateless when they married foreign men, are able to access free education at the primary school level (McKinsey, 2009). However, there is yet to be any legal provision in Vietnam domestic laws that explicitly provides RTE for stateless children within its region.

Thailand and Myanmar

Among AMS, Thailand seems to significantly advocate RTE for stateless children. Stateless people and stateless

children who seek refuge are given citizenship and education. Thailand's Constitution (Constitution of The Kingdom of Thailand 2007 [B.E. 2550]), clearly states that "a person", not specifically a citizen, has the right to receive 12 years of free education and the National Education Act 1999 provides that all children must attend 9 years of compulsory education (The United Nations Educational, Scientific and Cultural Organization [UNESCO], 2015).

However, in reality, very few children of stateless parents or unregistered migrants manage to send their children to schools. Stateless children are unable to receive K-12 formal education. As for the children who manage to attend "free" schools operated by non-governmental organizations struggle to further their studies. Many parents would prefer their children to work or some might even sell the children rather than sending them to school, due to poverty. In reality, most parents do not recognize the importance of education. Due to statelessness, their children will never be able to further their studies or work legally. Hence, access to higher education is not a possibility.

In principle, non-citizens or stateless children should have no problem attending high schools or universities in Thailand according to the government's Education for All (EFA) policy (UNESCO, 2015). However, reports still show that some educational institutions do not implement this policy, thus prompting non-citizen students to not enroll in order to avoid complicated circumstances. Most non-

citizen students do not continue their education after the sixth or ninth grade (The Isaan Record, 2016).

Regardless of this, aid for stateless children continues to take shape in Thailand and Myanmar. UNHCR and other NGOs constantly assist the stateless people and their children. The Human Rights Watch in Thailand, for instance, conducted a comprehensive study on stateless children of the Moken origin of Thailand and Myanmar who are deprived of their human rights. Governments of both countries are urged by UNHCR to immediately confer the basic human rights to these children and adults. The rights to citizenship, education, and health care are still a major concern for stateless children in Thailand and Myanmar indeed (UNHCR, 2015).

Malaysia

One of the fundamental rights enshrined in the United Nations (1948) Declaration of Human Rights and Article 28 (a) of the CRC¹ is access to education. As a member nation of the United Nations, Malaysia acceded to CRC but entered a reservation to Article 28(a) when it adopted the Convention on 17 February 1995. Notably, compulsory free primary education is limited to children who are Malaysian citizens. Alternatively, the non-citizen children are required to pay

¹ Malaysia's reservation on CRC: The Government of Malaysia accepts the provisions of the Convention on the Rights of the Child but expresses reservations with respect to Articles 2, 7, 14, 28 Paragraph 1(a) and 37 of the Convention and declares that the said provisions shall be applicable only if they are in conformity with the Constitution, national laws and national policies of the Government of Malaysia.

a minimal fee in order to be registered in government schools. Unlike the Malaysian children, the refugees, undocumented and stateless children in Malaysia have no access to formal education in government schools.

The policies and regulations for school children which are different for citizens and non-citizens limit stateless children's access to education. There is no law or policy laid formally for stateless children and Malaysia has yet to formally recognize Alternative Learning Programmes as an option to existing formal education (The United Nations Children's Fund [UNICEF], 2015b). And the fact that many stateless children are undocumented leaves their presence often unknown to the local communities and authorities. The stateless children are unable to access the national education system. However, they often rely on alternative learning centers managed by NGOs, foundations, churches, madrasahs and other non-government entities for basic primary education. The opportunities for private education in places such as Sabah, Sarawak or areas in West Malaysia are very limited with high tuition fees that are out of reach for the undocumented children.

Nevertheless, the government seems to show concern and support in providing education for stateless children. There are still many stakeholders in Malaysia, including government agencies, UNHCR, NGOs, corporates, foundations, faith-based agencies, communities, and individuals providing alternative learning opportunities to refugees, undocumented and stateless children in the absence of access to formal

government schools (UNICEF, 2015a). The civil society itself actively plays a significant role to aid the stateless children. Compassion is a ground to render some basic education to stateless children in Malaysia.

However, to date, the government has yet to formulate a-comprehensive law or policy on alternative education for immigrants, refugees, asylum-seekers, undocumented and stateless children in the country (UNICEF, 2015a). Nevertheless, there are cases that applied the provisions in the Federal Constitution to aid the stateless person and children in their effort to apply for citizenship. Despite that, the judgments by the courts in such cases vary according to the purposive interpretation and discretion of the presiding judges.

In 2018, a prominent case pertaining to stateless child, *Madhuvita Janjara Augustin (Suing Through Next of Friend Margaret Louisa Tan) v Augustin A/L Lourdsamy & Ors [2018] IMLJ* highlighted the interpretation and application of Article 14(1)(b) read with Part II Section (1) para (a) of the Second Schedule of the Federal Constitution in favor of the child at her best interest in a purposive approach.

However, the approach of the judiciary differed in *Pendaftar Besar Kelahiran Dan Kematian, Malaysia v. Pang Wee Swee & Anor (2017)*. In that case, the status of citizenship in the birth certificate of the adopted child was stated as non-citizen despite the adopted parents were both Malaysian citizens. But due to the fact that the child's biological parents could not be traced, and the elements of both concepts of

jus soli and *jus sanguinis* were not complied by the respondent on the facts of the case. Hence, article 14(1)(b) read with Part II Section (1) para (a) of the Second Schedule of the Federal Constitution was deemed inapplicable as the requirements were not fulfilled.

Furthermore, Abang Iskandar JCA propounded that the adoption of a child was not automatically to be construed to grant citizenship to the child via the adoptive parents (who are a Malaysian citizen or permanent residence in the Federation). It was held that the Adoption Act 1952 referred in this case is subsidiary legislation qua the Federal Constitution. Therefore, it could not be interpreted in such a way as to augment what appeared to be a perceived lacuna in the Federal Constitution. Hence the appeal by the National Registration Department was allowed by setting aside the decision of the learned High Court Judge thereby giving the option for the respondent (the adoptive parents on behalf of the stateless child), to apply for citizenship under Article 15A of the Federal Constitution. In short, the judiciary demonstrated that the interpretation of Article 14(1)(b) of the Federal Constitution read with the Part II Section (1) para (a) of the Schedule of the Federal Constitution must be in line with the fulfillment of the requirements in the said provision.

On the contrary, the case *Madhuvita Janjara* established a broader interpretation of the meaning 'parents' to bear its ordinary common-sense meaning in reference to the Black's Law Dictionary [10th Ed, Thomson Reuters]), to include adoptive parents. The

case of *Foo Toon Aik (Suing on his own behalf and as Representative of Foo Shi Wen, child) v Ketua Pendaftar Kelahiran dan Kematian, Malaysia* (2012) was referred to illustrate that the word ‘parent’ could not refer to a father of an illegitimate child and that the word ‘parent’ in Article 14 (1) (b) of the Federal Constitution referred to a lawful parent in a recognized marriage in the Federation, which corresponded to *Madhuvita’s* case as the father of the child (appellant) was her biological father who was a citizen of Malaysia.

The judgment delivered by Mary Lim Thiam Suan JCA at para 77 mentioned that “... *We agree with the submissions of learned counsel for the appellant that if the declaration sought is not given, if the appellant is not a citizen of the Federation, then she is stateless. That state would not and cannot be said to be in the best interest and for the welfare of the appellant. Consequently, the appellant satisfies the terms of Article 14(1)(b) read with section 1(e) of Part II of the Second Schedule to the Federal Constitution*”.

At para 79 of the judgment, the learned JCA held that “...*Given that the appellant and her underlying facts and circumstances have amply satisfied the primary rules of jus soli and jus sanguinis in the terms deployed in Part III of the Federal Constitution, in particular, Article 14(1)(b) read with sections 1(a) and/or (e) of Part II of the Second Schedule to the Federal Constitution, the appeal must be and is hereby, allowed in terms of prayer (iv)*”. The prayer was mentioned in para 80 of the judgment that “*the Registrar of Births and Deaths*

Malaysia re-register the status of citizenship of the appellant as “Malaysian citizen” and her religion as “Christian”.

The learned JCA further emphasized and reiterated the principles to be adopted when construing and interpreting the Federal Constitution as expressed in *Dato’ Menteri Othman Baginda & Anor v. Dato’ Ombi Syed Alwi Syed Idrus* (1984); “...*one is reminded that judicial precedent plays a lesser part than is normal in matters of ordinary statutory interpretation. As a “living piece of legislation”, the provisions in the Federal Constitution must be construed broadly and not in a pedantic way. The Court must recognize that the construction of the provisions of the Federal Constitution must be “with less rigidity and more generosity than other statutes” because the Federal Constitution is sui generis, “calling for its own principles of interpretation, suitable to its character, but without necessarily accepting the ordinary rules and presumptions of statutory interpretation.*”

Hence the interpretation and applicability of Article 14(1)(b) read with sections 1(a) and/or (e) of Part II of the Second Schedule to the Federal Constitution pertaining to citizenship of a stateless child, in particular, would still be subjected to the facts of the case and the discretion of the judiciary.

Although the recent stance of the government on RTE indicates its endorsement of education for stateless children, it only seems to cater for children who are without birth registration and those

born to a Malaysian parent, thus having the right to seek nationality by virtue of the Federal Constitution (NST Team, 2017). This still leaves the status of RTE for other categories of stateless children, such as those with unknown parents, born to refugee parents (stateless or non-citizens), unresolved.

Intergovernmental Joint Effort – Malaysia-the Philippines-Indonesia

Notably, there are continuous and positive intergovernmental joint efforts to promote RTE between Malaysia, the Philippines, and Indonesia to aid the stateless, who are also refugees. The Philippine and Malaysian governments are working closely in collaboration with the Indonesian government and the civil society in the nations, particularly in tackling the issues of citizenship and RTE.

Reports indicate two main types of community-based initiatives spearheaded by Filipino individuals in addition to the Philippine government's policy-level push to mitigate widespread illiteracy among the children (and adults). As for Indonesia, the government responded to the educational needs of the stateless children by sending Indonesian teachers to teach in local NGOs in the state and abroad, such as nearby countries like Malaysia and the Philippines with the cooperation of UNHCR, UNICEF and other international NGOs (Educate A Child, 2014a).

These non-formal and structured initiatives are carried out by at least five informal schools in providing free

education to the undocumented (who are stateless) children. The Humana Learning Centre (HLC), Stairway to Hope Learning Centre (SHLC), Vision of Hope Learning Centre (VHLC), Stairway to Success Learning Centre (SSLC) and *Persatuan Kebajikan Pendidikan Kanak-Kanak Miskin* (PKPKM) are the prominent centers that become informal schools for the refugees, undocumented (stateless children) in Sabah (Lumayag, 2016).

DISCUSSION

The above-mentioned findings of this research are essential to promoting recommendations to strengthen the force of upholding human rights and RTE for stateless children within the ASEAN region. The aim of this research is to analyze and measure RTE for stateless children in selected ASEAN countries against CRC.

The findings establish that the national laws and policies in selected ASEAN countries relevant to RTE for stateless children are inadequate. Those countries ought to review and improvise their national legislations to meet international standards in human rights for children and in compliance with CRC, particularly Article 28. There is a need to enact national legislation and revise existing national laws pertaining to stateless people and children.

However, most importantly, ASEAN and AMS²² need to have an effective legal and policy framework (Petcharamesree,

² For the purpose of this article, ASEAN Member States (AMS) is interchangeably used to refer ASEAN countries.

2015). The ASEAN countries bear responsibility and accountability to their people. As signatory member countries to CRC, AMS ought to uphold its legal and moral obligation to ensure RTE for stateless children in line with Article 28 of CRC, based on the core principles on “non-discrimination, best interests of the child, the right to life, survival and development and respect for the views of the child” (UNHCR, 1989). All AMS need to confront the issue of RTE and provide equal access to compulsory free primary education of an international standard for all children within this region as per CRC, without reservations.

CONCLUSION

Research findings that inform ASEAN’s policies on human rights appear to be conservative and lack engagement. Between economic and political policies, economic cooperation has benefitted from a number of agreements, but political collaborations, especially those concerning human rights still lack behind. Among the issues identified by ICHR are RTE and statelessness, although the member states have been somewhat reluctant in acting on the latter. The protection and promotion of the human rights of people forced to migrate are the prerogative and discretion of the national governments.

Despite having international laws to protect human rights, the rights of stateless children remain at stake. There are still legislative gaps whereby AMS has limited national laws and policies to ensure RTE for stateless children and youth. To date, only

two AMS acceded to the 1951 Convention Relating to the Status of Refugees and 1967 Protocol Relating to the Status of Refugees, namely (i) Cambodia (15 Oct 1992) and (ii) Philippines (22 July 1981). However, the Philippines is the only country that signed the 1954 Convention relating to the Status of Stateless Persons on 22 Jun 1955 and tasked itself with reducing statelessness. Further, the Philippines also deposited its instrument of ratification of the 1954 Statelessness Convention on 22 September 2011 (Human Rights Watch, 2015). Unlike the European Union which ensures its member states to abide by the international laws and treaties (Bourgonje, 2010), ASEAN has yet to exert its assertive role in ensuring AMS ratify several important international laws that will see to the protection of RTE for stateless children within this region as per CRC.

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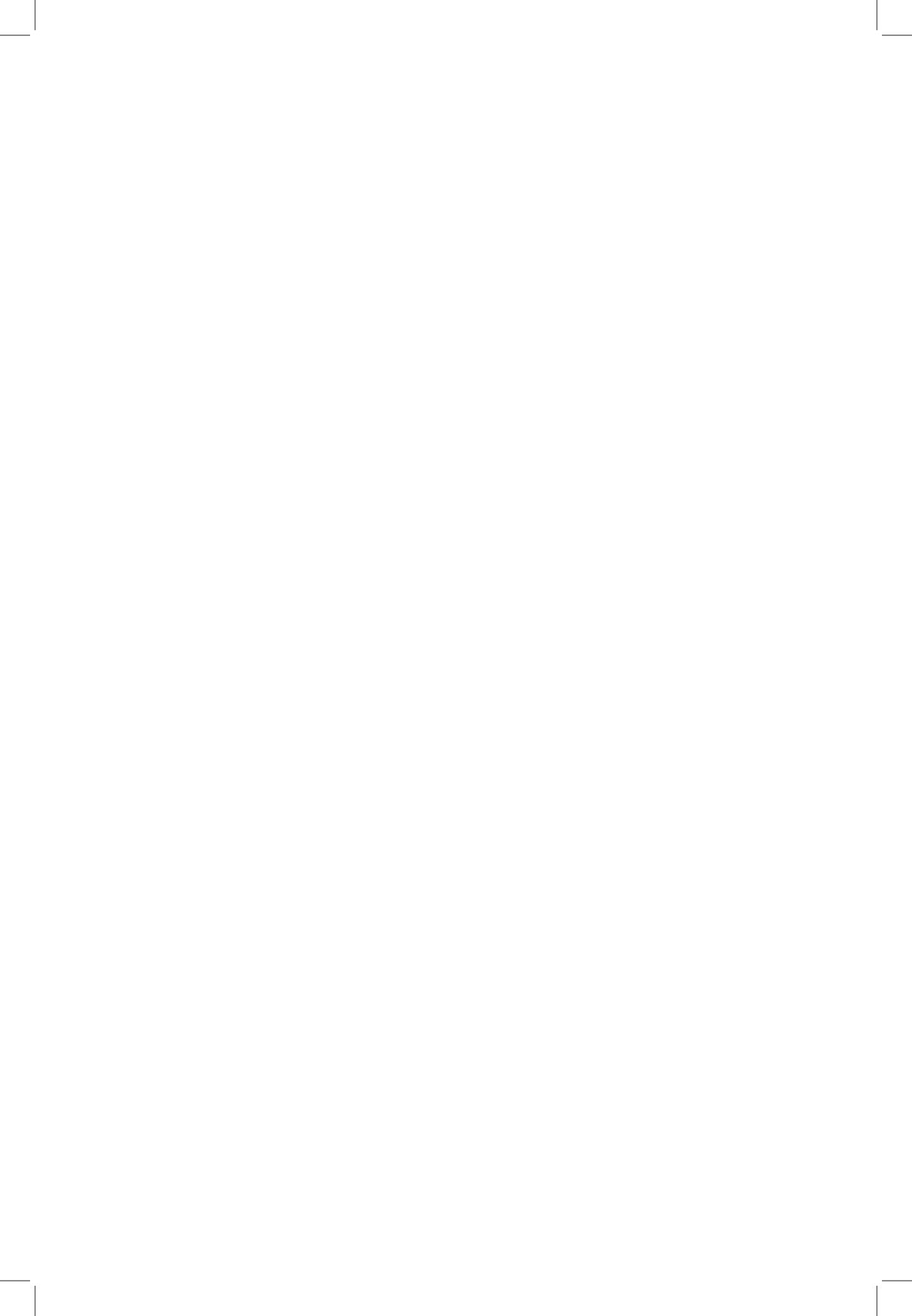
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Defining Employment Discrimination in Malaysian Legal Context

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ABSTRACT

Discrimination deprives people of equal rights. It creates barriers to employment and resulted in people's right to full participation in the workplace jeopardised. Consequently, people are denied jobs, confined to certain occupations, offered with lower pay, refused promotion and increment, and so on. The grounds for discrimination are commonly owing to their 'physical appearance' such as sex, race, the colour of skin, faith or religion regardless of the capabilities and abilities to performing the job. Therefore, promoting equality by eliminating various forms of discrimination is essential. This paper is looking at employment discrimination from the legal perspective. Generally, the meaning and elaboration of employment discrimination together with its types and grounds are presented by considering other jurisdictions, particularly the United Kingdom, that has her anti-discrimination law namely Equality Act 2010. Owing to the absence of anti-discrimination law in Malaysia, the authors founded the discussion on this Act of the UK while the analysis of employment discrimination in Malaysia is presented by analysing the related court cases. The paper showed that employment discrimination did occur in Malaysia. This paper is expected to give some limelight and reflection on the issues concerned principally in defining employment discrimination within the Malaysian legal context.

Keywords: Discrimination, employment, equality, legal, legislation, Malaysia

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INTRODUCTION

Right against discrimination is pertinent for humanity, economic and social reasons as work is manifestly essential and vital means of livelihood. Work as a principal source of income has its significance in people's lives without which, people would lose a

sense of personal worth (Collins, 2003). In Malaysia, protection to the workers is assured with an acknowledgement to the right to livelihood as a fundamental right (Jaafar et al., 2017; Mohamed, 2007). Across different countries and cultures, stigma and discrimination form an important barrier to work reintegration (Brouwers, et al., 2016). Thus, discriminating people is denying them their full participation at the workplace which includes declining them jobs, segregating them to certain categories of occupations, offering lower pay, refusing promotion, and so on. All these are done due to the grounds or characteristics that people may have which can be gender, race, colour or age; matters that generally irrelevant to the capabilities and job performance.

Looking at the definition in Burton's Legal Thesaurus (Burton, 2006), "discriminate" means "differentiation, disequalisation, inequality, injustice, unfairness"; while "employment discrimination" is "bias in the workplace, prejudice in an employment environment". Victorian Equal Opportunity and Human Rights Commission (2018) defined "discrimination" as "treating or proposing to treat someone unfavourably because of a personal characteristic protected by law". While Darby (2005) described discrimination as "the treatment of a person in a less favourable way than another person is, has been or would be treated", Hongchintakul and Kleiner (2001) said, "discrimination is any situation in which a group and individual is treated differently based on something other than individual reason, usually their membership

in a socially distinct group or category". The International Labour Organisation [ILO] (2007) further considers discrimination as "a differential and less favourable treatment of certain individuals" because of any characteristics such as sex, race, and religion, "regardless of their ability to fulfil the requirements of the job". Willey (2012) in explaining discrimination, questioned whether the selection of a worker was dependent on the objective criteria (such as experience, skills, and qualifications) or unlawful criteria (like gender, pregnant women or disabled person). This act of selection (treatment), whether discriminatory or not, depends on the grounds of making the selection. It is inequitable treatment amounted to employment discrimination when the employer makes a selection and decision based on the criterion that is not job-related.

Discrimination works reversely when it deprives people of their equal rights, a human-right-based entitlement. The global community for decades is in unanimity to promote equality by incorporating the principle in most states' constitutions. The Charter of the United Nations of 1945 declares that "*All human beings are born free and equal in dignity and rights*". Article 7 of the Universal Declaration of Human Rights (UDHR) further says: "*All are equal before the law and are entitled without any discrimination to equal protection of the law. All are entitled to equal protection against any discrimination in violation of this Declaration and against any incitement to such discrimination*". The ILO also

established the non-discrimination principle since the Declaration of Philadelphia in 1944 and makes it as the agenda of Decent Work. Recently, a shared Sustainable Development Goal 2030 by the UN addresses the global challenges including the promotion of equality as one of the goals.

In Malaysia, it was reported that gender inequality is persistent in both formal and informal sectors (United Nations Development Programme [UNDP], 2014). In terms of the labour force participation rate, women were recorded 49.3% and men 77% (ILO, 2017); almost similar to the current global report. A result by the Workplace Discrimination Survey revealed that more than 40% of women polled from across Malaysia experienced job discrimination due to pregnancy together with the identified treatments such as making their positions redundant, being denied of the promotion, prolonged the probation, demotion, and termination (Women's Aid Organisation [WAO], 2016). Furthermore, unequal pay is prevalent when women were shown to be earning less than men in all occupational sectors (Department of Statistics Malaysia, 2017). Having mentioned these, the ratification of the Convention on the Elimination of Discrimination Against Women (CEDAW) and the inclusion of the word "gender" (as part of the equality right) in the Federal Constitution are reflecting that women should not be discriminated (Mohamed, 2017). Human Rights Commission of Malaysia [SUHAKAM] (2010) reported that most employers considered women a

disadvantage because of the entitlement for maternity leave as well as a tendency to prefer family to work. Some studies in Malaysia found that women were not just under-represented in technical and professional fields but significantly diminished in the levels of management and decision-making (Hutchings, 1996; Koshal et al., 1998; Lee & Nagaraj, 1995; Sheikh, 2010). Furthermore, the employment structure is intensely segregated by gender and the areas in which women predominate are those which portray low skills, low wages and little opportunities for career advancement (Ahmad, 1999; Nor, 1997; Sheikh, 2010). Othman and Othman (2015) further concluded that work discrimination among women employees occurred more in the upper-level management position as compared to lower-level jobs. Hence, discrimination in employment is believed to be relatively common in Malaysia but occurs discreetly. Accordingly, Ng (2016) proposed to strengthening legal and policy frameworks as well as engendering institutional arrangements.

It is, therefore, the aim of this paper to analyse employment discrimination from the Malaysian legal context. While Malaysia has no explicit legal provisions and anti-discrimination legislation that outlaw and defines discrimination particularly in the employment setting, this article presented the discussion by making references to the provisions of the Equality Act 2010 of the United Kingdom (UK). The idea is to propose a direction to the discrimination law in Malaysia. Founded on the UK

jurisdiction, the cases of employment discrimination in Malaysia are analysed by considering the constitutional provision so as to give reflection to the Malaysian legal context and at the same time to make a recommendation.

METHODS

This study used a legal research method through a qualitative approach. The legal authorities, particularly the legal provisions and reported cases relating to employment discrimination in the UK were descriptively considered. Based on this finding of the UK, the legislative provisions and reported cases related to employment discrimination in Malaysia were critically analysed. The findings are subsequently presented in the result and discussion part. It is to note that the pattern of employment discrimination varies. It may affect the prospective employees, current employees or past employees; also, it may involve any stages of employment practices including employee selection, hiring, training, job assignment, and so on (Connolly, 2004; McColgan, 2005). For the purpose of this study, the scope of employment discrimination was confined within the employment relationship, thus involving the employer and the employee who were under the contract of service. Therefore, employment discrimination as defined in the context of this study concerns only with the treatment of the employer towards the employee within the working environment.

RESULTS AND DISCUSSIONS

Employment Discrimination

Discrimination in the workplace is a common occurrence that arises at all levels, from the advertisement, recruitment, interviews, employment contracts, throughout performing the job including promotion, training, transfer, and termination. This indicates that employment discrimination may occur to a person or an employee. Part 5 of the Equality Act 2010 of the UK (hereinafter referred to as EA 2010) focuses on employment. In specific, section 39 mentions:

“(1) An employer (A) must not discriminate against a person (B)—

(a) in the arrangements A makes for deciding to whom to offer employment;

(b) as to the terms on which A offers B employment;

(c) by not offering B employment.

(2) An employer (A) must not discriminate against an employee of A's (B)—

(a) as to B's terms of employment;

(b) in the way A affords B access, or by not affording B access, to opportunities for promotion, transfer or training or for receiving any other benefit, facility or service;

(c) by dismissing B;

(d) by subjecting B to any other detriment.”

In response to this provision, as against an individual, an employer must not discriminate in the arrangement for deciding whom to be offered employment, as to the terms of employment, or by not offering employment; as against an employee, there shall be no discrimination to the terms of the employment, the opportunities for promotion, transfer, training, receiving any benefit, facility or service, the dismissal, or to cause any employee to be the subject of any detriment (Emir, 2018).

Direct and Indirect Discrimination.

Discrimination is classified as direct or indirect. Direct, overt or blatant discrimination “occurs when one person treats another less favourably, on the grounds of gender, marital status or race, than she/he treats or would treat a person of another gender, marital status or race” (Painter et al., 2004). Moran (2013) perceived disparate treatment (as commonly used in the United States) to exist when an employer treated an individual differently because that individual was a member of a particular race, religion, gender or ethnic group. Hence, direct discrimination “denotes unequal treatment based on the grounds of the victim’s sex or marital status or racial grounds” (Deakin & Morris, 2012). A reference to the EA 2010 can be made through section 13 that defines direct discrimination as follows:

“(1) A person (A) discriminates against another (B) if, because of a *protected characteristic*, A treats B *less favourably* than A treats or would treat others.”

[Emphasis added]

Emir (2018) clarified that “a person discriminates against another if, because of protected characteristics, he treated that other less favourably than he treated or would treat others”. B here can be a prospective or actual employee who is directly discriminated against by another person if he has been treated less favourably than they treat others due to certain protected characteristics. Based on the interpretation of the EA 2010, the essential elements are: (a) “less favourably”, and (b) “protected characteristic”. Taylor and Emir (2015) referred this as a two-stage test: (i) to look whether the discriminatory treatment was less favourable treatment than had been given to someone else; and (ii) to consider whether it was because of the protected characteristic.

Other than direct discrimination, some acts operate subtly, called indirect discrimination. It occurs when a company’s policies, procedures or rules which apply to everyone affect people with certain protected characteristics and they are put at a disadvantage when compared with those who do not share it. The acts or practices are fair in form but unequal in impact (Painter et al., 2004). Tomei (2008) referred to it as “to norms, procedures, and practices that appear to be neutral but whose application disproportionately affects members of certain groups”. For example, an advertisement that fixes the height will ignore a certain group of people, either men or women. On its surface, the requirement appears to be workable to all groups but looking at the effect, it is discriminating or

victimising certain people. Section 19 of the EA 2010 says:

“(1) A person (A) discriminates against another (B) if A applies to B a provision, criterion or practice which is discriminatory in relation to a relevant protected characteristic of B’s.

(2) For the purposes of subsection (1), a provision, criterion or practice is discriminatory in relation to a relevant protected characteristic of B’s if—

(a) A applies or would apply, it to persons with whom B does not share the characteristic,

(b) it puts, or would put, persons with whom B shares the characteristic at a particular disadvantage when compared with persons with whom B does not share it,

(c) it puts, or would put, B at that disadvantage, and

(d) A cannot show it to be a proportionate means of achieving a legitimate aim.”

In *Price v Civil Service Commissioners* (1978), the age limit of 28 that imposed for clerical posts in the civil service was found to be indirect discrimination. According to the court, the requirement failed to consider the common work patterns of women when compared to men at that particular time. Hence, indirect discrimination is basically meant to avoid employers from requesting conditions that are not necessary for the job but would have the effect of excluding the proportionately high number of people from

one particular group (Upex & Shrubsall, 1995).

An important distinction between direct and indirect discrimination is that the former has no defence of justification while the latter can be justified to achieve a legitimate end (Emir, 2018). As far as the employer’s practices are concerned, justifying factors are possible as long as an objective balance was strike between the discriminatory effects of the provision and the reasonable needs of the business: *Network Railway Infrastructure Ltd. v Gammie* (2009).

Less Favourably. Grant (2002) indicated less favourable treatment as different and disadvantageous. For instance, a male worker with less skill is offered with promotion as compared to his female colleague. In this context, an actual or a prospective female worker was treated less favourably due to the protected characteristics, such as sex – the point that judiciously has nothing to do with the job performance.

Less favourable treatment is not a mere different treatment. The element of “less favourable” calls for the act of “comparing”. Here, to compare the one who was treated less favourably with the other who was not. Adopting this understanding, the treatment should be a person of one sex to be compared with the other of the opposite sex, a married person with a person of the same sex who is unmarried, and so on. In other words, the treatment of the claimant must be compared with that of an actual or hypothetical person who does not share the same protected characteristics as the

claimant. If the claimant is blind and applying for a computer operator, he is to be compared with a person who is not blind who applying for the same job as a computer operator (Emir, 2018). The case of *R v Birmingham City Council ex parte EOC* (1989) elaborated “less favourable”. Here, the Council was claimed to provide lesser grammar school places for girls compared to boys and refused that less favourable treatment had been caused to the girls. The House of Lords had then formulated a test for establishing direct discrimination namely (Painter et al., 2004): “(i) was there an act of discrimination? If the answer is yes, (ii) but for the complainant’s gender (or race), would he/she have been treated differently, i.e. less favourably?” Here, the question was whether the treatment is less favourable and on the protected characteristics. This has also been agreed in *Zafar v Glasgow City Council* (1998) where the question of whether an employer had acted reasonably or not was irrelevant in establishing whether there had been less favourable treatment.

Protected Characteristic. Section 4 of the EA 2010 has listed down the protected characteristics, namely, age, disability, gender reassignment, marriage, and civil partnership, pregnancy and maternity, race, religion or belief, sex, and sexual orientation. Chapter 1 of the EA 2010 further elaborates on each of these protected characteristics. With regards to the age, section 5 says:

“(1) In relation to the protected characteristic of age—

(a) a reference to a person who has a particular protected characteristic is a reference to a person of a particular age group;

(b) a reference to persons who share a protected characteristic is a reference to persons of the same age group.”

To explain this, in *James v Eastleigh Borough Council* (1990), both Mr. and Mrs. James, aged 61, went for a swim in the Council’s baths. Mrs. James was allowed in free but Mr. James had to pay where he claimed for direct sex discrimination. The rationale for such treatment was explained due to the state pension age of women at 60 and men at 65 and yet, the court found it as caused less favourable treatment to men thus violated the spirit of anti-discrimination law. The European Court of Justice found otherwise in a more recent case of *Achbita v G4S Secure Solutions* (Court of Justice of the European Union, 2017). It was mentioned that, since the employer had a general rule against religious and political displays, a Muslim woman who was prohibited from wearing a headscarf was not treated differently than other workers. In other words, a Muslim woman who was fired owing to her wearing an Islamic headscarf at her job did not suffer from direct discrimination.

Employment Discrimination in the Malaysian Legal Context

Cases of employment discrimination involving language spoken, race issue,

gender, religion, and age are common in Malaysia (Lokman & Atikah, 2018). Lee and Khalid (2016) who investigated racial discrimination in hiring fresh degree graduates in Malaysia through a field study found that race mattered much more than résumé quality. A study by Richardson et al. (2013) suggested that age discrimination occurred via direct bias against older workers. Moreover, the Malaysian Association of Hotels supported the policy of keeping out the frontline staff from wearing headscarves and claimed it an international practice (Ng, 2017). The issue was also prompted in a study of the Centre for Governance and Political Studies (2019) that found racial discrimination as apparent in private sector recruitment. A report of the Ministry of Human Resources (2014) indicated complaints of employment discrimination that include sex and racial discrimination, sexual harassment, lack of facilities to perform prayers, Muslim men were disallowed to take Friday prayer, employers who hired candidates with Chinese language proficiency, as well as job advertisements with a certain range of age or sex.

Less Favourable Treatment. The element of ‘less favourable’ that requires the act of ‘comparing’ (the one discriminated against and the one who did not) is essential to establish a discriminatory treatment. As compared to the phrases of ‘less favourable’ as applicable in the UK, the word ‘unfavourable’ is mostly found in the cases of dismissal and discrimination in Malaysia

when the employees claimed the unfair treatment employers towards them. It is remarkable to consider a comment by Emir (2018) who suggested that, ‘less favourable’ treatment should be distinguished from ‘unfavourable’ treatment because the former requires a comparator while the latter does not.

In *Beatrice Fernandez v Sistem Penerbangan Malaysia & Anor* (2005) (hereinafter referred to as *Beatrice Fernandez*), the clauses of the collective agreement offered different treatment to different sets of people of men and women employees (stewards and stewardesses) which accordingly invite the issue of discrimination; in this context, sex/gender discrimination. The court in this case instead of considering the different treatment between gender, found the constitutional law, specifically Article 8, as a branch of public law that has no connection with the private matters as in this case of employment. The High Court in *Supercomal Wira and Cable Sdn. Bhd. v Anjana Devi A/P Satiavelu and Others* (2003) found that “there was clear discrimination by the appellants against the respondents when action was only taken against the five respondents” (although 95% employees had breached the order and had taken lunch outside the lunch hour) but ruled such act as breaching the principles of natural justice. To respond to the EA 2010, the court here had considered the less favourable treatment of respondents when ‘compared’ them with the other 95% employees who had breached the order. This is indicating a similar approach was applied

although the court considered the issue of discrimination together with the principle of natural justice.

In the case of *Integrated Forwarding & Shipping Bhd. v Rozia Abdullah* (2000), a workman claimed against the employer who treated her differently when compared with other employees who obtained retirement benefits. The court deemed it as a wrong exercise of the employer that amounted to discriminatory practice thus constituted unfair labour practice. In a recent case, *Rajasekar K. Suppiah & Ors v. Malaysian Airline System Berhad & Anor* (2019), one of the claims was about the different working hours (that breached the collective agreement), thus asserted this as discrimination. Looking at the nature of work which was unlike, the court viewed that the claimants cannot compare the two categories when alleging discrimination as it is not an apple to apple comparison. The Industrial Court in *National Union of Employee in Companies Manufacturing Rubber Products v. Ansel Companies Operating in Melaka* (2014), at 397, decided that:

The respondents chose to absorb the meal allowance into their basic wages of only 128 workmen who fell in the lower job category. The meal allowance of the other workmen who earned basic wages of more than RM 900 per month just before the implementation of the said order and for those in the higher job categories was maintained. That was obvious discrimination of workmen in the lowest job category and it has disturbed the conscience of the court.

Furthermore, in *Leo Burnett Advertising Sdn. Bhd. v Agnes Ann Rodriquez* (2003), the workman proclaimed the company for refusing her yearly increment, bonus and *angpow* when compared with almost all other employees. The Industrial Court ruled that *angpow*, bonuses and year increment are the company's decisions that relied on the workers' performance. There was no discrimination because the claimant was not the only one who did not receive these. As a matter of fact, "there is no evidence adduced by the claimant to prove that the company had deliberately discriminated against her in favour of others who were equal to her in position, salary, job function and work performance". In *Ahmad Tajuddin bin Hj Ishak v Suruhanjaya Pelabuhan Pulau Pinang* (1997), the claim was about breaching Article 8 of the Federal Constitution. When deciding whether there was an unfair treatment among the security assistants, the Court of Appeal had compared every one of them with the auxiliary police constable and found that all of them were on the same salary scale, received the same amount of take-home pay at the end of each month, and were given the same opportunity to apply for the post of auxiliary police sergeants. On this point, there was no breach of Article 8.

Looking at all these judgments, the courts in Malaysia generally and incidentally consider the elements of "less favourable" and "comparison" in determining the claims of discrimination practices at the workplace.

Protected Characteristic. While the EA 2010 enumerates the protected characteristics such as sex, race, age, and religion, as far as Malaysia is concerned, the provision that incorporates the grounds of discrimination that can be referred to, is Article 8(2) of the Federal Constitution. It says: "...there shall be no discrimination against citizens on the ground only of religion, race, descent, place of birth or gender...". On this account, Malaysian law is somewhat pertinent to proscribe discrimination and any attempt to discriminate on any of these grounds is considered as illegal subject to several exceptions. Despite an argument that Article 8 is confined to public matters having no regard to private parties (as ruled in *Beatrice Fernandez*) the following will examine the grounds of discrimination in the Malaysian context.

Gender/Sex. Women are the common victims of discrimination although men can also be the subjects. Though the word "gender" shall apply to both women and men, the purpose of the legislator was to dismantle discrimination that affects women more than men. A landmark case on gender discrimination was brought up in *Beatrice Fernandez*. The case was about the issue of the collective agreement which was binding on all stewardesses that comprised the terms that discriminated women. The applicant was a stewardess in the Malaysian Airline System (MAS) and was terminated for being pregnant. The Federal Court held, *inter alia*, that the constitutional law as a branch of public law. When the rights of a

private individual are infringed by another private individual, constitutional law will take no recognisance of it. In this case, rather than proving whether discrimination had taken place or not, the court examined the extent of Article 8(2) of the Constitution and concluded that "regardless of how we view and review Article 8 of the Federal Constitution, we could only come to the same conclusion as the courts below that the collective agreement does not contravene our Federal Constitution" (*Beatrice Fernandez*, at 725).

One way of proving discrimination is to demonstrate that the employer's rule involves different treatment for one of the protected groups as Collins (2003) said, "the rule does not directly refer to sex as a criterion, but since only women can become pregnant, the rule necessarily involves different treatment for men and women". It is the employer's role to justify and rationalise his action for having such rules or terms. Looking at *Beatrice Fernandez*, the employer's role was dispensed with when the honourable court testified "those special conditions" are "peculiar to such specialised occupation". Be that as it may, so far as *Beatrice Fernandez* is concerned, Article 8 is insignificant to protect gender discrimination. The position, however, is hoped to be reversible with the effect of the amendment to the word "gender" in Article 8. With such dismayed decision, the case of *Noorfadilla binti Ahmad Saikin v Chayed bin Basirun and Ors* (2012) a few years later had proven otherwise when the right against discrimination has its light in Malaysia. It

was held by the High Court that a refusal to employ a woman due to pregnancy alone was a form of gender discrimination, thus unconstitutional and against Article 8 of the Federal Constitution. Despite this celebrated decision, the Court of Appeal in a more recent case of *AirAsia Berhad v Rafizah Shima binti Mohamed Aris* (2014), held that a provision in a training agreement which did not restrain marriage and/or prohibit pregnancy if the respondent completed her training in the manner stipulated in the agreement did not discriminate and against the rights of women.

It is worthwhile to consider a related provision of the EA 2010, particularly section 18 that relates to the pregnancy and maternity discrimination in the work cases. It says:

“(2) A person (A) discriminates against a woman if, in the protected period in relation to a pregnancy of hers, A treats her unfavourably —

(a) because of the pregnancy, or

(b) because of illness suffered by her as a result of it.”

This section is clear enough to the effect that discrimination due to pregnancy and maternity is unlawful.

Race. The race is another forbidden ground mentioned in Article 8(2). As far as *bumiputra* (specifically referred to the Malays and natives of Sabah and Sarawak) is concerned, it is subject to the exceptions that have been circumscribed under the Constitution. Though this exception appears

to be discriminating, ‘special privileges’ or called ‘positive discrimination’ is legal and allowed discrimination. It is remarkable that the word ‘race’ itself has no interpretation except Article 160 that says Malay, the majority race, as a person who professes the religion of Islam, habitually speaks the Malay language and conforms to Malay customs. No definition is however offered to other races. Another word that may be interpreted as ‘race’ is perhaps ‘descent’ as the former will more often than not represent the latter. To give ‘descent’ its precise understanding, the interpretation shall not just confine to ‘race’ but lineage or ancestry such as of a royal family or an ordinary person: *Public Prosecutor v Tengku Mahmood Iskandar & Anor* (1973).

Religion. Generally, Malaysia is the land of multi-races with many religions. While other races such as Chinese and Indian are practising different religions of Islam, Hinduism, Buddhism, Christianity, and other faiths, the Malays are practising only Islam and associated with the religion of Islam (Article 160). While Islam is the religion of the Federation through Article 3, there is still a balancing clause whereby “other religions may be practised in peace and harmony in any part of the Federation”. Having this understanding, Article 8(2) inclines to recognise religion as one aspect that must be given an impartial consideration. For this reason, citizens of Malaysia shall not be discriminated against on the grounds of religion.

Nationality/Place of Birth. Clause (2) of Article 8 gives protection to citizens. Any immigrants and non-citizens have no rights over this provision save for clause (1) that provides equality for all persons. On the subject of citizenship, one has to deal with the term ‘nationality’ as it “has a juridical basis pointing to citizenship”: As *per* Lord Johnston in *Northern Joint Police Board v Power* (1997) (hereinafter referred to as *Northern Joint Police Board*), at 613. In the field of employment, foreign workers may be singled out because of their nationality but by right, they may get similar protection under the laws of the country as long as they have valid work permits. It is common for the industries and private companies nowadays to employ foreign workers for corporate and business strategy as well as justify the shortage of labourer while at the same time sustaining the profit. This phenomenon would create discrimination between local and foreign employees. The legal provisions that are protecting the locals against foreign employees are sections 60L, 60M, and 60N of the Employment Act 1955. Section 60M prohibits the employer from terminating the contract of service of a local employee to employ a foreign employee. While this provision is essential in protecting the right of tenure of local employees, it could not guarantee their job placement because the employer can still prefer foreign employees for cheap labour. The local employee can assuredly make a complaint to the Director-General of Labour that he is being discriminated against concerning a foreign employee, for instance, in respect of the terms and conditions of his employment

(Section 60L). Section 60N further requires the employer, in exercising retrenchment, to first terminate the services of all foreign employees employed in a capacity similar to that of the local employee.

‘National origin’ can also be the ground for discrimination. While nationality refers to the citizen of a country, national origin offers a more specific indication that “identifiable elements, both historically and geographically, which at least at some point in time reveals the existence of a nation”: *Northern Joint Police Board*. In *Ealing LBC v Race Relations Board* (1972), Lord Simon clarified that “Scotland is not a nation but Scotsmen constitute a nation because of those most powerful elements in the creation of national spirit”. To respond to this judgment, Malaysian is a nationality while, for example, Kelantanese, may be considered as ‘national origin’. In the context of the Federal Constitution, the phrase ‘national origin’ might be relevant to the ‘place of birth’. Therefore, while equality must be upheld regardless of nationality, discrimination may not be executed for the reasons of national origin or place of birth.

Additionally, in the authors’ opinion, another point that may associate with race is language. In a multi-racial society, different languages are used in Malaysia. More often than not, language mirrors the race. Article 152(1) states that the Malay language shall be the national language. Being considered as special and a language of unity, other languages are practicable without restraint. The deliberate expression of the Malay language as the “national

language” is because “*Bahasa* should be used not only for official purposes but also as an instrument for bringing together the diverse and polyglot races that live here and thus promote national unity”: Suffian LP in *Merdeka University Bhd v Government of Malaysia* (1982), at 249 (*Merdeka University*). Although being guaranteed by the Constitution, as a result of globalisation, other languages such as English or Mandarin essentially become preferential in the private sector employment. This nevertheless shall not be seen as against the Constitution as far as “official purpose” is concerned. Article 152(6) provides “official purpose” to mean “any purpose of the Government, whether Federal or State and includes any purpose of a public authority”. Reading Article 152 together with the National Language Act, the practice is not unconstitutional to the extent that “a person is prohibited from using any language for official purposes” and “no person shall be prohibited or prevented from using (to be specific) Chinese for unofficial purpose” (Suffian LP in *Merdeka University*, at 249).

It is quite common for some private employment to request for Chinese language or Mandarin as a prerequisite to employment. Since language could represent race, it is perceived that only the Chinese would be able to fulfil the requirement. In some way, this may incite racial discrimination, against the principle of equality and be counted as indirect discrimination affecting other groups of people. Considering the defence of the employer, a justification for doing so is commanded.

Having considered the cases and judgments in Malaysia, although the cases might not be entirely pertinent to the context of employment discrimination, it is deemed to understand that the courts are seemingly prepared to hear such claims in the absence of any legal provisions that outlawing discrimination. Even one can see in some cases, the application of ‘comparison’ has been exercised in assessing the element of ‘less favourable’ while determining the discriminatory treatment. Be that as it may, the right interpretations of the word discrimination should be expected when an appropriate approach to the concept, in particular within the employment setting, is anticipated. To look at the issue of employment discrimination from the legal context of Malaysia as at present is unpromising in the absence of a specific provision that prohibits discrimination. Without an explicit explanation to the word makes the claim of employment discrimination ineffective even though less favourable incidences are, to some extent, prevalent in the workplace particularly when it arises in covert and subtle ways. In response to the current fact and in the light of Article 8 of the Federal Constitution as discussed above, it is therefore recommended for Malaysia to legislate a specific provision or law that prohibits employment discrimination or any discrimination practices. It is predictable that by having a specific law, the problem can be addressed more effectively and seriously.

CONCLUSION

Discrimination in the world of work manifests all levels of employment. Promoting equality and combating discrimination at the workplace are essential parts of upholding decent work, the key element to achieving a fair globalisation and poverty reduction (International Labour Office, 2011). While the world community should be firmly enfolding equality as a thrust of unanimity, any subdivisions and elements of unfairness, prejudice, and discrimination must be resisted. It is for this reason that regulations and legislations are mechanised to respond to the issue. Legislative interference aiming at safeguarding the employees is essential for the effectiveness of the labour standards (Hassan, 2008). In the case of Malaysia, employment discrimination has become among the issues in the labour sector recently. Without an explicit anti-discrimination law or legal provisions outlawing employment discrimination like the EA 2010 of the UK, the Federal Constitution nevertheless, does provide the notion of equality but within a confining interpretation as far as gender discrimination, particularly in the private sector, is concerned. Despite this, in its substantive term, complaints on the issue to the Department of Labour have never been disregarded while claims on the subject matter have been given some ways by the Industrial Court though the attempts were of no avail as at present. Although judicial reviews and cases presented above may not be entirely pertinent to the concept of discrimination, it is signifying that Malaysian courts are ready to hear employment

discrimination claims. The right approach to the concept would be workable if the word discrimination in employment is defined appropriately. At this point, discrimination at work indubitably results in inequality, unfairness, and diversity in the labour market outcomes. From the legal point of view, this should be contrary to the principle of equality because it denies one's rights; in the labour context, it refutes employees' rights.

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Critical Analysis of the Progressive Law Theory on the Constitutional Court Judges' Decisions in Indonesia Regarding Marriageable Age Limit

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ABSTRACT

This study aims to analyze the implementation of Progressive Legal Theory (PLT) indicators on the Constitutional Court judges' decision in Indonesia in decision No.30-74/PUU-XII/2014 concerning restrictions on marriageable age and reconstruction of PLT in the study of the operational legal system in Indonesia. This study is empirical with primary data in the form of free-guided interviews and secondary data by analyzing judges' decisions in content analysis. The results of this study showed that eight judges had implemented indicators of PLT, namely indicator 3, 5, 8, and 10. While indicators 1, 2, 4, 6, and 7 had not been implemented. One judge had a dissenting opinion with the reasons: The decision has progressivism values; The Court's decision implements 'the law as a tool of social engineering'; and the different regulations regarding the marriage age limit extend legal uncertainty. The implementation of PLT indicators on judges who had dissenting opinions in their entirety matched the PLT indicators. The findings showed that decision No. 30-74/PUU-XII/2014 had not fully used ten indicators of PLT. The reconstruction of the Progressive Legal Theory in the study of the operation of the legal system in Indonesia was formulated with 3 main indicators namely living law, legal system, and legal harmonization.

Keywords: Constitutional judge, marriageable age limit, progressive legal theory (PLT), verdict

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INTRODUCTION

Judicial review decision in article 7 of Law Number 1 of 1974 against the 1945 Constitution in case No.74 / PUU-XII / 2014, the Constitutional Court decided to reject all requests, especially the amendment of marriage age for women. The verdict

hearing readout on June 18, 2015, stated that the reason for the judges' refusal was based on a consideration that the minimum marriageable age limit of 18 years was not the most ideal in the future.

Of the eight judges who stated that they rejected the petition, only one judge had a different opinion. The difference in opinion illustrates the real condition of the issue of the marriageable age limit, especially at the age limit for women. It is essential to raise the age limit of marriage because of the age limit stated in article 7 of Law no. 1 of 1974 seen no longer able to adjust to the current socio-cultural conditions. This demand becomes very significant due to the impact that occurs on married women at that age. The period is a productive age for school. At that age, married women are very vulnerable to suffer from health problems such as early childbirth, eclampsia and anemia during labor, and a higher risk of mortality and morbidity for children born to young mothers. In addition, underage marriage for women leads to higher rates of violence physically and emotionally than marriage for women as adults (Arthur et al., 2018). Another study also indicates that early marriage perpetuates or extends the cycle of poverty and lack of education. Child brides are drawn out of school, losing their right to education and meaningful work (Roy, 2015). Poverty and low levels of education are two things that are always related. Most dropouts are caused by financial reasons. Child Rights Coalition Malaysia, for instance, reported that children from low-income families are

more likely to drop out of school to work to provide the needs of family and younger siblings (Makhtar et al., 2017).

In Indonesia, the age limit for marriage of 16 years for women as determined by Law No. 1 of 1974 contributes to the prevalence of underage marriage which was fatal to the sustainability of marital life. Mothers and children face problems due to unrecorded marriage at the Office of Religious Affairs, which lead to legal consequences for mothers and children resulting from informal weddings (Harahap, 2017).

Various attempts were made to prevent child marriages, including prohibitions and closing legal loopholes that allow underage marriages (Arthur et al., 2018). Other efforts are also made by providing premarital education programs. A study by Margaret showed that the catholic premarital education program carried out in the Arch-Diocese in Kisumu was relevant and able to overcome most of the challenges that arise in marriage (Buore, 2019).

Indonesian Constitutional Court judges are of the view that in various countries the restrictions on marital age are not the same, with ages ranging from 15 years to 22 years. The age limit of marriages that occur in Indonesia cannot be compared to other countries due to the different socio-cultural conditions.

Table 1 explains the age limit for marriages in several countries in Africa, America, Asia, Europe, and the Oceania regions (Wikipedia, 2019).

Table 1
Marriageable age limit in various countries

Country	Without parental or judicial consent		With Parental Consent		With Judicial Consent	
	Man	Woman	Man	Woman	Man	Woman
Algeria		19		19		-
Burkina Faso		20	20	17	18	15
Egypt and Tunisia		18		18	18	
Argentina		18		16	-	
Brazil		18		16	16	
Mexico		16	16	14	-	
Afghanistan	18	16	18	15	18	15
China	22	20	22	20	-	
Lebanon	18	17	17	15	15	9
Italy		18		18	16	
Netherlands		18		18	18	
Turkey		18		17	16	
United Kingdom	18 in most jurisdiction 16 in Scotland			16	16	
Australia		18		18	16	
Nauru	18	16	18	16	-	
Samoa	21	19	18	16	-	

In general, the marriageable age limit in this world does not differ greatly in the range of 17 to 20 years. This means that the age limit has become a general limit for marriage. Although it cannot be denied there is also a marriage age limit under 16 years, but the number of countries is not much. As a government decision in the regulation, this limit has certainly been carried out in-depth studies.

The impact that occurred after the ratification of the constitutional verdict was the community demand who felt disadvantaged by the various polemics that were increasingly happening. Community social institutions, health experts and psychologists assess that the differences of views between the government and the

community were inevitable as if the court did not listen to the expert testimony brought to trial. The decision delivered by the judges is controversial in the community, so it is vital to research by reviewing it from 10 indicators of PLT.

From this background, the issues raised in the study are: First, how is the implementation of PLT indicators in the judgment of the Indonesian Constitutional Court in case No.30-74 / PUU-XII / 2014 concerning marriageable age limits? Second, how is the reconstruction of PLT in the study of the operational legal system in Indonesia after the decision No.30-74 / PUU-XII / 2014? This problem emerged as a form of academic anxiety that was later analyzed in-depth using the perspective of PLT.

LITERATURE REVIEW

Satjipto Rahardjo's original idea about Progressive Legal Theory (PLT) revolves around discourse, writings in the mass media, seminars in forums, and learning in postgraduate studies (Azizy et al., 2006; Kusuma, 2009; Mahfud et al., 2011). Continual efforts continue to be rolled out so that the progressive legal mindset continues to develop. As of the inception in 2002 up to now, there have been hundreds of writings and researches that discuss legal issues using a progressive legal perspective. Understanding of PLT is also carried out on law enforcement officers through training centers and further studies conducted by law enforcement officers.

Sidharta concluded the indicators that were the keywords of PLT (Mahfud et al., 2011), namely: 1) Progressive law is aimed at humans, not vice versa. So that in a state of legal and human dialectics, the law must be adjusted based on the human condition at that time, not vice versa; 2) Allegiance to the people and justice is a reference of progressive law. The alignment of law with the people and justice must be the main priority in the regulation; 3) human well-being and happiness are the goals of progressive law; 4) progressive law is not an absolute or final institution, as the law is always in the process of becoming (law as a process, the law in the making); 5) Progressive law promotes strong moral values as a good legal basis for a good life; 6) The type of progressive law is responsive in the sense that law can be correlated with values outside the text; 7) Progressive

law mobilizes the autonomous power of society or promotes the role of the public; 8) Progressive Law aspires to build a 'state with a conscience' with a commitment to make people happy; 9) Progressive Law puts forward the value of spiritual intelligence; 10) Progressive law is tearing down, replacing, and liberating. Progressive law does not accept the doctrine that law is absolute to be carried out.

The indicators presented above are an illustration of the philosophical pillars developed as academic reviews. It is not easy to translate the mindset of PLT into an operational setting, especially for those who work daily in the field of law. This means that changes in mindset and in operational order with various translations require a long time. Efforts to change this mindset as an integral part of the legal culture process developed.

Thus, the theory of progressive law teaches Indonesian people that carrying out law enforcement must be done freely. Satjipto Rahardjo stated two things that were the object of the exemption (Mahfud et al., 2011). First, the exemption is carried out on the types, theories, principles, and ways of thinking that have been used so far. Second, the liberation should be free from previous ways of law enforcement which is not in line with the resolution of legal issues. This exemption arises along with the disappointment with the quality of applying the law which leaves the essence of the justice values. If the judicial method leaves the values of justice, that will lead to the emerging of anomalies that gather

strength in the injustice values felt by the community. Substantial justice values synergize with spiritual and moral values, all of which support progressive law in thought and behavior.

In the course of history, the development of PLT experienced ups and downs with various pros and cons responses. As a legitimate idea, it is very scientific if the time and circumstances will test the strength of this progressive law. As an idea, progressive law is inseparable from the falsification carried out by scientists and legal scholars, including legal practitioners who consciously all of them provide a progressive mode of law enforcement in the future (Sidharta, 2012).

The idea of progressive law is interesting to study as a coherent part of the dynamics of law in society. This indicates that the interpretation concept of the law also follows the development of the era, which is oriented to the progress itself. The values to be achieved and developed in progressive law all boil down to the justice values, moral and spiritual values, values of substantive justice or in other words the values grew in the life of society (living law) (Rahardjo, 2002).

Legal cases that arise and disappear are integral parts of the struggle for progressive legal thinking. During this time, the study of progressive law was born in the midst of anxiety that plagued academics who saw the way to judge in a society that was not qualified in upholding the values of justice. Because of this progressive legal thinking brought up by academics, the pattern of

communication and the translation of mindset need deep reflection along with its theoretical existence. This comprehensive view arises because all this time, what has been seen is a boundary between the campus on the one hand and the legal community on the other.

The existence of PLT initiated by Satjipto Rahardjo led to the law enforcement issue. It was seen to be decreasing in the quality of the way to do the law, which resulted in mere procedural justice. PLT has been developed and implemented since 2002 until now, of course, the factors that influence the pattern of progressive law enforcement both *das sein* and *das sollen* can be examined. The success of law enforcement certainly cannot be separated from the functioning of the legal system adopted by a country that has historically been influenced by countries that have colonized it. Lawrence M. Friedman saw that the success of law enforcement was always supported by all components of legal systems such as the component of the legal structure, the component of legal substance, and the component of legal culture (Friedman, 1975).

METHODS

This study is a kind of empirical juridical research with the statutory, conceptual, and case approach. The legal materials from this study came from primary, secondary, and tertiary data. Primary data derived from the free interview method guided by an open questionnaire. The 9 informants are Judges in the Indonesian Constitutional

Court. The secondary data were the verdict and minutes of the trial in case No.30-74 / PUU-XII / 2014, as well as several related laws and regulations including the relevant literature review and the overall data collected. The analytical method used was analyzed in accordance with the scope of the problem and assessed based on a conceptual foundation. The first problem was carried out with a content analysis study (Silverman, 1993). To analyze the second problem, we used a qualitative descriptive analysis. The qualitative data was described in words to get a conclusion.

RESULTS AND DISCUSSIONS

Differences in Opinion of Nine (9) Constitutional Court Judges regarding the Marriageable Age Limit

The Constitutional Court is a state institution authorized to exercise judicial review, or more specifically to conduct a constitutional review of the Law and the other specific tasks, namely the *previlegiatum* forum or the judiciary specifically to decide upon the opinion of the House of Representatives that the president has violated certain things mentioned in the Basic Law so that it can be dismissed (Mahfud, 2011).

Nine (9) Constitutional Court Judges stated in decision No. 30-74/PUU-XII/2014 that the marriageable age limit for women was not a matter of constitutionality. Determination of 16 years or 18 years is an open legal policy to lawmakers. According to the Constitutional Court Judges, in a quo case, the 1945 Constitution did not regulate the age limit of a person referred

to as a child (*Decision of the Constitutional Court Number 30-74/PUU-XII/2014, 105-106*). When the constitution does not restrict clearly, determining the age limit of marriage is the full authority of the legislators. Whatever the choice, lawmakers can change or maintain existing marriage age standards. Whatever their decision is not prohibited and as long as it does not conflict with the 1945 Constitution. As an open legal policy, the existence of a marriage age standard interrelated with the marriage age dispensation can certainly be considered the same. Amendment or stipulation of marriage age dispensation can be changed at any time by the legislators following the demands of existing development needs.

The current construction of Indonesian Marriage Law is considered irrelevant. The reconstruction of the legal formulation has become something very urgent because it is considered no longer appropriate to the needs, situations, and conditions of the times. The legislation governing the minimum age of marriage cannot resolve the complexity arising legal problems, especially the high number of child marriages that have many negative impacts, both for individuals and society, and the state in a broad sense.

The eight Constitutional Court Justices who refused the request to change the age limit for marriage gave their views as follows:

First, the Constitutional Court Judge adopted different understandings regarding marriageable age limits of religions and cultures prevailing in Indonesia. In various countries, the marriageable age limit for

women has not been changed. The need for age restrictions on marriage is not something urgent to avoid negative things. Those can all be prevented by a legal marriage according to religious teachings so that it will not cause the status of children out of wedlock. Thus, the court believes that the age limit for marriage in article 7 paragraph (1) of Law Number 1 of 1974 does not need to be revised.

Second, Article 7 paragraph (1) of Law Number 1 of 1974 which regulates marital age restrictions is a national constitutional agreement, so that article is an open legal policy for the House of Representatives. Thus, the House of Representatives can at any time change the age limit of marriage following the aspirations of the community. Therefore, the Court invited the legislators to carry out a legislative review of changes in marital age restrictions.

Third, in consideration of the Constitutional Court's decision to reject the judicial review of Law number 1 of 1974 concerning Marriage, namely article 7 paragraph (1). The Constitutional Justice said that no guarantee increasing the age limit for marriage from 16 years to 18 years for women would reduce the number of divorces, health, and social problems. "There is no guarantee that the increase of marriageable age limit for women from 16 to 18 years, will further reduce the number of divorces, tackle health problems, and minimize other social issues ". Limiting marriage age for women to 18 years is not ideal. The court believes that in several countries, the age limit for marriage is

varied from 17 to 20 years (*Minutes of the Constitutional Court hearing of the Republic of Indonesia Case Verdict No.30-74/PUU-XII/2014*).

Fourth, the Constitutional Court considered that the provision of Article 7 paragraph (2) of Law Number 1 of 1974 concerning marriage dispensation is still needed because it functions as an emergency exit when a marriage occurs as a result of the parents' wishes. The word "deviation" that wants to be added to the Article is refused for reasons outside marriage.

Fifth, the Constitutional Court recommends facilitating access to marriage dispensation outside the court such as the Office of Religious Affairs, Districts, Sub-Districts and even the Head of Village with the purpose to aid the community in applying for marriage dispensation. The view in consideration of the eight judges is a very juridical normative and philosophical at the beginning of the review. The flow of positivism is still clearly visible in this consideration. Efforts to make a breakthrough in the field of law are still not entirely made from the eight judges if we analyze it from 10 indicators of PLT.

One judge has a different view. The reasons stated were that marriage for children would harm children's physical development, mental, intellectual, and health aspects. Besides, the right to receive a 12-year compulsory education program could not be fulfilled because the marriage had an impact on hampering education. The marriage did not provide an opportunity for children to grow and develop towards

maturity, so it was very vulnerable to both sexual and non-sexual violence. Thus the regulation of marriage age settlement, as stated in Article 7 of Law Number 1 of 1974 had caused problems in its application in the community (*Minutes of the Constitutional Court hearing of the Republic of Indonesia Case Verdict No.30-74/PUU-XII/2014*).

The judge also believed that the marriageable age limit in Article 7 of Law No. 1 of 1974 should be connected with Article 6 paragraph (1) stipulating that a marriage is based on the consent of the two brides, while paragraph (2) states that a marriage of a person who has not reached 21 years must obtain permission from both parents. The provision of 16 years in Article 7 has created legal uncertainty and violates the rights of children following Article 1 paragraph (3), Article 28B paragraph (2), and Article 28C paragraph (1) of the 1945 Constitution.

Application of Progressive Legal Theory Indicators by Nine (9) Constitutional Court Judges

The view in consideration of 8 Constitutional Court judges is a very juridical normative and philosophical. Efforts to make a breakthrough in the field of law are still not entirely made from the 8 constitutional judges if we analyze it from 10 indicators of Progressive Legal Theory (PLT).

From the 9 Constitutional Justices that the author examined, there are several things analyzed:

1. From 10 indicators of PLT, researchers analyzed the eight

judges' opinions who carried out PLT in their decisions on indicators 3, 5, 8, and 10.

2. While indicators no 1,2,4 6 and 7 have not been implemented. This indicates that the judges' decision has not fully used the PLT indicators.
3. For the implementation of PLT on the Judge who has the dissenting opinion is bound entirely to the ten (10) indicators of the PLT. This interpretation can be seen implicitly and explicitly from the diction: the values of progressivism.

The determination of the progressivism values, in this case, is on the judges' considerations in the decision. In this case, the judges examined not only based on the Articles written in the Basic Law but also the legal considerations taken from 'the living law' or the law that lives in the community.

The opinions and considerations of the Judge who has the dissenting opinion are examined in the Perspective of PLT as follows:

- a. The verdict on this dissenting opinion is based on the overall reasons stated and following the ten postulates of PLT.
- b. The Court's decision is as a law through social engineering medium (law as a tool of social engineering). In a quo case, the decision will change into the adjustment forms in implementing the Marriage Law. This condition will also lead to

the culture and tradition changes regarding child marriage as applied so far in society. It justifies the use of 'law as a tool of social engineering'.

- c. The judge's consideration is agreeing with the PLT delivered on a normative juridical basis.
- d. The occurrence of different regulations regarding the marriage age limit extends legal uncertainty.

The Urgency of Reconstruction of Progressive Law Theory (PLT)

The process of forming this reconstruction theory is based on the implementation of the Constitutional Court judge's decision using PLT as the basis to view the formation of legal theory philosophically. The purpose is to complement some of the visible weaknesses of PLT. The theory experiences obstacles in its implementation. The Ten (10) indicators that serve as benchmarks for assessing the successful application of the Constitutional Court's decision concerning marital age restrictions are not fully used by the judges. With this reality, the reconstruction of PLT is needed.

There are three components in the reconstruction of PLT. These three components work together and are related to one another as follows:

1. Living law

The primary sources of social life are social and religious principles which provide a legal basis for the diversity of differences that exist in

society. The concept of living law really determines the continuity of community life because as a source 'living law' will never run out. Social rules that produce moral ethics and religious norms which bring life guidelines in the world and the hereafter provide inner peace for its adherents. Thus whatever is produced by the legal system must synergize with 'living law' so that the application of the legal system will be effective in law enforcement in the community.

2. Legal System

The result of living law is the legal system. Determination of the legal system adopted by a country is very dependent on three main elements which Lawrence M. Friedman called as legal institutions, regulations, and legal awareness. Those elements have a vital role in law supremacy. These three elements become an absolute requirement to provide an assessment of whether the law in a country is enforced. The elements which become the driving force for law enforcement in a country are inseparable from the influence of modernization. If there is one element that does not play a role, then the principle of justice will not be achieved in society. The running of the legal system in a country is inseparable from the influence of social changes in society. Thus social change causes changes in the law. A legal system that can adapt is the legal system that responds to social changes quickly to

minimize negative impacts in the future. Social changes originating from living law in the community can be carried out frequently by making changes to the law to create legal harmony.

3. Legal Harmonization

Community life can experience balance by upholding the principle of justice in various interactions of community members in all fields. Harmonization is the key to success in law enforcement. It is the goal desired by all humans. Harmonization will result from the synergy of ‘living law’ and ‘legal system.’ It is built on an ongoing basis in society so that people will feel patriotic life much better. Harmonization that occurs in the community is inseparable from the interaction among the community members who put forward values and norms that serve as guidelines for life. The values and norms in society, such as religion, social, and legal norms are the basis for harmonious survival among members of the community and

to face conflicts that lead to the national disintegration.

Disintegration arises due to differences in opinions that lead to unhealthy behavior triggered by injustice problems, discrimination, social inequality, and so on. In the end, disintegration never results in calm, comfort, and security of life as an essential source of harmonization of social life. Restoration of the social life of the community will be harmonious again if national and state awareness arises in each member of the citizens.

Awareness of the harmonization of life that influences the need for agreement among the community members carries the desire for universal agreement from an unwritten rule to a written one. Legal certainty approved by all parties becomes a social contract that is mutually agreed upon. This legislation process will be strengthened legally after being approved by a legal institution so that all members of the community will obey it.

The reconstruction of progressive legal theory is illustrated in Figure 1.

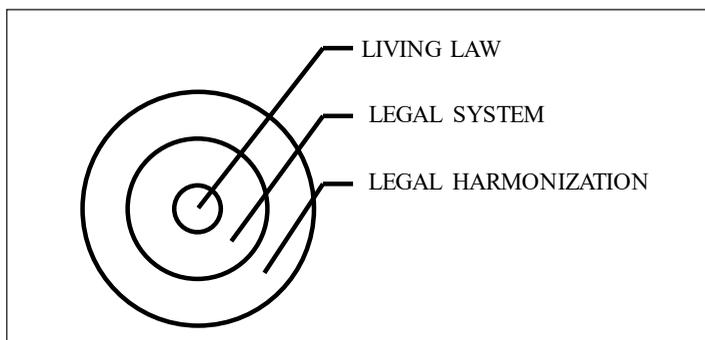


Figure 1. The scheme of progressive legal theory reconstruction

CONCLUSIONS

1. From nine (9) judges of the Indonesian Constitutional Court concerning the ten (10) indicators of the PLT, it can be concluded that there are eight (8) judges who have applied the indicator number 3, 5, 8, and 10. Indicator number 1, 2, 4, 6, and 7 have not been implemented in the decision. Meanwhile, one judge had a dissenting opinion with reasons: The decision has the value of progressivism, and agreeing ten indicators of PLT; The Court's decision applies the law as a tool of social engineering; Different regulations regarding marriage age limits extend legal uncertainty. From those nine judges, it can be concluded that the Constitutional Court's decision has not entirely used ten indicators of PLT.
2. As for the reconstruction of the Progressive Legal Theory in the study of the operation of the legal system in Indonesia after the decision on a case, No.30-74 / PUU-XII / 2014 was formulated with 3 main indicators namely living law, legal system, and legal harmonization.

Implications

1. Reviewing the existence and application of PLT, in the decision of the Constitutional Court, proves that most of the Judges in the

Constitutional Court in Indonesia still uses the view of positivism.

2. PLT Reconstruction is an initial concept as a theory finding that underlies the theory of law as a tool of social engineering development in Indonesia.
3. Depth studies need to be conducted on the judge's behaviour research in making decisions. Because study about the judges' views and opinions is inseparable from their behaviour and ways of thinking.

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Wellbeing of Older People in Iran: An Application of the Global AgeWatch Index

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ABSTRACT

The world population is ageing as a consequence of demographic changes: the number of older persons will double from its current number of about one billion people to two billion by 2050. Iran is no exception in this respect as its population of older persons would reach approximately 29 million by 2050. This speed of ageing categorizes Iran as a fast ageing society, emphasizing the need for adopting comprehensive policies and interventions to address issues related to older ages. To this end, constructing monitoring instruments will facilitate evidence-informed policymaking. One such recently developed instrument is the Global AgeWatch Index (GAWI) which consists of four domains and 13 indicators, namely Income Security, Health Status, Capability and Enabling Environment. This paper constructed GAWI to measure well-being for older people in Iran and determine the country's relative position in comparison to 96 other countries included in the latest

estimates of the GAWI. The results show that Iran shares the 75th rank with the neighbouring Turkey out of the total of 97 countries covered by the Index. For Iran, domains of Health Status hold a relatively higher rank and the Capability and Enabling Environment being at the lowest rank.

Keywords: Global AgeWatch Index, Iran, population ageing, social policies for older people, well-being of older people

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INTRODUCTION

Motivation

Population ageing is a demographic trend arising from fertility decline and rising longevity through which the age structure of the population changes. In the majority of the countries, mortality transition happens earlier than fertility transition and this leads to an increase in longevity prior to fertility decline. In the earlier phases of population ageing, the number of older people goes up due to individual ageing or the rise in survival chance within the life cycle effect (Lee, 1994). The pace of population ageing is always affected by the level of fertility in the past, life expectancy and its alteration in the future, as well as the speed of fertility decline.

Within the context of such demographic changes, the world's population is said to be ageing. According to the latest World Population Ageing (WPA) Report, the number of the population aged 60 and above will climb from 901 million in 2015 to 1.4 billion in 2030 and 2.1 billion in 2050. Accordingly, the world's older population will be even more aged in the future as the number of those aged 80 and above would increase from 125 million in 2015 to 434 million in 2050: a rise from 14 percent to 20 percent (United Nations, 2015a).

The main objective of this paper is to present a brief picture of older population in Islamic Republic of Iran in the most important dimensions, namely living conditions, capabilities and enabling environments. In addition, this paper reports on the calculations of the Global Age Watch

Index for Iran which allows us to compare Iran's relative position in comparison to 96 countries already included in the Global AgeWatch Index (GAWI) calculations¹. Among the 96 countries, the number of Asian countries in the latest edition is 23, including the two most populous ones – i.e. China and India – and Japan. At the same time, these 23 countries account for 52% of the world's older population (HelpAge International, 2015a). Iran would be the 24th country in Asia that enters this internationally comparable instrument measuring the older population's wellbeing.

Challenge of Population Ageing in Iran

Iran is among those countries in which fertility has sharply declined (Mirzaei et al., 1996) from about seven children per women in the 1980s to beneath the replacement level in recent times (Abbasi-Shavazi et al., 2009). This sharp decline came about through major improvements in health and continuous progress in living standards that also resulted in higher life expectancy (Koosheshi & Niakan, 2016; Saraei, 1997; Sharifi, 2006). All these changes along with the demographic transition are adequate to expedite population ageing in Iran and place the country among the so-called hyper-ageing societies². Moreover, the baby boom of 1978-1985 has further accelerated the process of population ageing.

1 For further information on the methodology report see: Zaidi (2013)

2 Hyper-ageing societies are those in which 30 percent or more of the population are aged 60 years or more.

According to the latest population and housing census of Iran in 2016, approximately 7.4 million or the equivalent of 9.3 percent of the total population are 60 and above. Five years earlier, i.e. in 2011, this figure stood at 6.2 million constituting eight percent of the total population. This delineates a growth of about 3.8 percent in the population of older persons, which is approximately three times as much as the overall population growth that stands lower than 1.3 percent. According to the 2017 World Population Prospect medium variant, around 29 million people in Iran will be 60 and above and some 21 million 65 and above by 2050.

According to the 2015 GAWI Report, there was only one country (Japan) with over 30 percent of its population comprising older persons; in 2030, however, the number of hyper-ageing countries will reach 26 and thence 62 by 2050 (HelpAge International, 2015a). In the context of Iran, even if the number of the population reaches 110 million based on the high fertility scenario, the proportion of older people would still top 25 percent. Consequently, Iran would at any rate be one of the 62 countries dealing with rapid population ageing.

Other Challenges Linked with Population Ageing

Some characteristics of population ageing such as feminization of ageing as well as regional disparities in the number of older persons are considerable. According to the population and housing censuses in Iran, sex ratio of some of the age groups of

older people which used to be 120 male to 100 female during 1970s to 2000s is now decreasing (Koosheshi et al., 2014), and according to the United Nations population projections will reach to around 91 men to 100 women by 2050. Taking into account the important differences in family and socio-economic life of older men and women in Iran, feminization of ageing can have significant implications for the wellbeing and health of older persons. On the other hand, due to different fertility rates in the provinces of country (Abbasi-Shavazi et al., 2009), the provincial ageing index varies largely from less than 10 to more than 40 older persons (65 years old and above) to 100 under 15 years old (Koosheshi et al., 2014).

Currently, developed countries, the majority of whom enjoy effective monitoring systems and intervention plans for older persons, are among the oldest populations around the world: in Japan 33 percent, in Germany and Finland 28 percent, and in Italy 27 percent of the population are aged 60 and above. Indubitably, the status quo will change. Based on UN projections and the World Population Ageing Report, 80 percent of the total population aged 60 years old and above would be living in developing countries by 2050, while the aforesaid proportion was in the neighborhood of 67 percent in 2015. Furthermore, the proportion of the population aged 60 and above in high income countries – where policies and intervention plans for older persons are well developed – takes a downward trend from 34 percent in 2015 to 23 percent in 2050. On

the contrary, in lower and lower-mid income countries, the same proportion increases from 30 to 38.5 percent in the same period (United Nations, 2015a, 2015b).

Older persons continue to be affected by social inequalities. In its 2013 World Social Situation Report, the UN announced that despite the improvement in the Gini coefficient between 1980 and 2010, income inequality has not yet lowered down to its level in 1980 (United Nations, 2013). In the same report, inequalities have been reported high among and within countries. In spite of the convergence in life expectancy at birth among countries, the gap increased from the highest level in Japan (thanks to the introduction of feasible longer life programmes) between the 1990s and 2010s. In other areas, namely educational attainments, the inequalities between and within countries have been declining although the level of educational inequality in developing countries is significantly higher than that in developed countries. The Gini coefficient of education (similar to the Gini coefficient of income) in developing countries was 0.19 in 2010, while the rate in developing societies is 37.0 (United Nations, 2013).

In HelpAge International (2015), inequalities between countries in health, education and income have been on the rise. According to the report, the difference in life expectancy of countries placed at the top (generally developed nations) and at the bottom (generally developing countries) in GAWI ranking varies from 5.7 to 7.3 years, the inequality of educational attainment has

grown by 50 percent from 1990 to 2012 and the economic prosperity gap has been particularly significant among the age-old cohorts (HelpAge International, 2015a).

While economic problems have always challenged the world, there is no guarantee that all governments and families can afford to provide adequately for older people. These conditions play a vital role in the life of older persons as they will enjoy security when they have enough resources to meet their basic needs, protect themselves from shocks and manage their resources independently (Zaidi, 2011). In addition, socio-demographic changes affect family composition, which in turn disturbs the relationships required for providing various modes of nursing and emotional support to older persons by family members.

The unbridled and unrelenting process of urbanization, especially in less developed countries, puts a proportion of the older population at risk, particularly those living in unconventional settlements and inappropriate physical environments. These changes may widen inequalities not only between countries, but also within them, and thereby exacerbate the anguish of older persons. All of these concerns are in the situation where, as noted above, the growth in number and increase in the proportion of the older population has been considerably accelerated.

In the context of socio-economic changes, population ageing, widespread inequalities between and within countries and uncertain economic conditions, effective response to the challenges of population

ageing requires the formulation of evidence-based strategies and interventions. Of course, the degree of the success of such programmes and interventions depends on the existence of comprehensive and strong datasets showing the status and characteristics of older people. In addition, the effectiveness of interventions as well as the monitoring of emerging needs of older people and their strengths and weaknesses require standard measures. Such measures can also support the identification and clarification of the context and causes of social inequalities among older people, and further determine the global ranking of countries in such areas. Fortunately, methods have already been developed for measures that are capable of representing the condition of older people and some regional disparities in their living conditions³.

Introducing Global AgeWatch Index

The GAWI was developed by Zaidi (2013) while working with HelpAge International. This index follows three main objectives: first, measuring and improving the quality of life and the wellbeing of older people; second, highlighting the strengths and weaknesses of strategic responses to the challenges of population ageing around the world; and third, encouraging the production and use of data needed to provide evidence-based policies for older persons (HelpAge International, 2015b). As can be seen in Figure 1 below, the GAWI is derived from the combination of four domains for older persons, each with defined indicators: income security, health, capability and enabling environment⁴.

DATA AND METHOD

Several sources were used to compute indicators in each domain of the GAWI,

3 See, for instance, the methods developed for the Active Ageing Index, cf. Zaidi et al. (2017).

4 For a discussion on methodology, see Zaidi (2013)

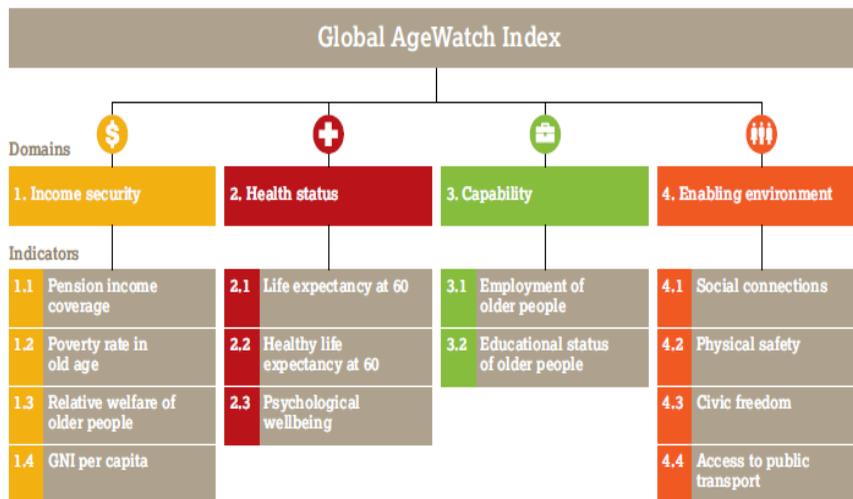


Figure 1. Global AgeWatch Index, domains and indicators

as shown in Figure 1. Population Censuses also provided concise information on some of the socio-economic characteristics of older persons. In the first domain, i.e. income security, the main source of data for calculating the three indicators of pension income coverage, poverty rates in old age and relative welfare of older people was Iran's Household Income and Expenditure Survey (HIES). For the fourth indicator, i.e. gross national income per capita (GNI), the sources were National Transfer Accounts released jointly by the World Bank and the UN National Accounts System.

In the second domain or health, there are three indicators: life expectancy at the age of 60, healthy life expectancy at the age of 60 and psychological wellbeing. The data for the first two indicators was available in the health profiles of countries which were prepared by the *World Health Organization (WHO)* and the information needed for the third indicator was collected through a national survey. Census and Labor Force Surveys were two sources available for calculating the indicators in the third domain (capability) such as older people's employment and education. Other than the estimates made by the Gallup Institute, there is currently no other source for calculating the fourth domain on enabling environment. These indicators include social connections, physical safety, civic freedom and access to public transportation.

The measuring of each domain is made possible by using the abovementioned indicators. To calculate the index value for

each domain, these values were first adjusted to express them as positive indicators: the proportion of households below the poverty rate indicator was reversed to make it the proportion of persons who are non-poor. One other adjustment included a use of the logarithm of the GNI per capita rather than its raw data. The final calculation was based on the normalized value of these adjusted values. The normalized value for each indicator was obtained by dividing the difference between the adjusted value and the observed minimum of that value by the difference between the upper and lower goalpost (which are specified for each indicator in the tables included in the paper). The final score of each domain was derived from the geometric mean of the weighting of normalized grades of indicators in each domain. The weight of each indicator in each domain is specified in the relevant table. The overall score of the GAWI was calculated with the geometric mean of the four domains with equal weights.

RESULTS

Income Security

Indicator 1.1: The pension income coverage is the ratio of older people aged 60 and above who receive pension. This ratio was estimated to be around 26% in 2013.

Indicator 1.2: The poverty rate in old age is the ratio of older persons living in households whose income or consumption is below the relative poverty line. This line comes from a 50-percent average income

or consumption. According to Iran's HEIS in 2013, the ratio was 20.3% meaning that 79.7% of the households of older people were above the poverty line (Table 1).

Indicator 1.3: The relative welfare of older people is the ratio of the average income/expenditure of the population aged 60 and above to the average income/expenditure of the rest of the population. The larger this ratio, the higher the relative welfare of people aged 60 and above. This ratio is 110.06 using the HEIS data (Table 1).

Indicator 1.4: The GNI per capita is the average income per person and equal to the total value added of all domestic producers plus taxes (minus subsidies) for products not subject to final product valuation together with the net income of the labor force (salary and property income) from the rest of the world divided by the population of the country. This average is proportionate to

the purchasing power of the dollar currency with the fixed prices of 2011 and represents individuals' living standards in a given country. According to World Bank (2013) estimates, the GNI per capita was USD13,451 as of 2013 (Table 1).

Health Status

Health is a major aspect in measuring the wellbeing of older persons. Longevity is associated with physical disability correlated with increasing the risk of the onset of illness and disability. The ideal of most people and communities is to maintain health in old age. As one ages, access to effective social and health care has a direct impact on individuals' personal lives. Maintaining health also affects the ability of older people to achieve other health-related outcomes. Another important aspect of life affected by health is the ability to

Table 1

Average values of "income security" for each indicator in Iran, 2013

Income Security	Pension income coverage	No Poverty rate in old age	Relative welfare of the elderly	GNI per capita
Indicators	1.1	1.2	1.3	1.4
Weight	40%	20%	20%	20%
adjusted (raw)	26.40(26.40)	79.7(20.3)	110.6(110.6)	4.1(13451)
Normalised	24.8	58.6	72.1	65.2
Upper goalpost	100	100	136	4.8(65000)
Lower goalpost	2.1	51	45	2.8(700)
Geometric Mean	44.3			

Source: Statistical Center of Iran (2013) for indicators 1.1, 1.2, 1.3 and World Bank for 1.4

* Adjusted value of poverty rate in old age is equal to 100 minus raw value (20.3) and that of GNI per capita is its logarithm.

live independently and remain self-reliant. According to the WHO, health is “a state of physical, mental, and social health, and not just a lack of disease or disability”; hence, mental health is considered as an important dimension of this concept. As a result, it was deemed appropriate to use the three indicators of life expectancy by the age 60, healthy life expectancy by the age 60, and psychological wellbeing to measure health outcomes (Zaidi, 2013).

Indicator 2.1: Life expectancy at the age of 60 is the average of years that a 60-year-old is expected to live under conditions that are at risk of the age- and sex-specific mortality rates expected at this age. As shown in Table 2, life expectancy at the age of 60 was estimated around 20 years in 2013.

Indicator 2.2: Healthy life expectancy at the age of 60 is the average number of years a 60-year-old is expected to live in full health, taking into account illness and injuries. The value of this index for Iran is

estimated to be 15.3 years based on WHO estimation (Table 2).

Indicator 2.3: Psychological wellbeing was measured using a question for two groups at the age of 35 and above. By answering this question, this measure was calculated from the ratio of people aged 50 years or more who felt their life was meaningful to people aged 35-49 who felt the same. As shown in Table 2, according to the Gallup Institute, the ratio of people 50 years or older who feel their life is meaningful is about 84 percent as against those aged 35-49.

Capability

Education and employment are two of the factors that empower older people to overcome ageing problems. Employment is introduced as an interface for economic empowerment: the access of older people to the labor market and, therefore, their ability to supplement pension income through wage-earning income and access to

Table 2
Average Values of “Health Status” for each Indicator in Iran, 2013

Health Status	Life expectancy at 60	Healthy life expectancy at 60	Psychological well-being
Indicators	2.1	2.2	2.3
Weight	40%	40%	20%
Adjusted (all raw)	20.0	15.3	83.90
Normalised	41.7	52.5	47.8
upper goalpost	27.0	21.0	110
lower goalpost	15	9.0	60.0
Geometric Mean			47.0

Source: WHO 2015 for Indicators 2.1 and 2.2; Gallup 2013 for indicator 2.3.

support networks associated with jobs and workplace (Zaidi, 2013). The third domain of the GAWI is defined by two indicators: first, the employment rate or ratio of older people who are employed and second, the proportion of older people with secondary and higher education.

Indicator 3.1: The employment rate measures older persons' access to and presence in formal and informal sectors of the labor market, hence, their ability to complete payroll pensions as well as their access to work-support networks. This measure was calculated as the proportion of the population aged 55-64 who are employed. Although censuses provided the data needed for the calculation, the International Labor Organization (ILO) statistics were the basis for calculating this rate which, as estimated in Table 3, is about 35.5% for Iran.

Indicator 3.2: Older persons' education translates into the ability and adequacy of

those persons in terms of knowledge, skills and attitudes that increase the quality of life in ageing. Education is an indication of a long-term accumulation of skills and abilities that demonstrate human and social capital among older persons. This measure was derived from the proportion of the population of 60 and above who had high school and higher education. The data needed to calculate it internationally could be derived from the Barro-Lee databases and nationally from local censuses. International estimates depict that 29.8% of Iran's older people meet the minimum level of education mentioned. Table 3 shows the statistics in this regard.

Enabling Environment

Indicator 4.1: Social connection measures the mental dimension of relatives and friends in supporting older people. The data needed to measure this indicator was derived from this question through a survey: "If

Table 3
Average Values of "Capability" for Each indicator in Iran, 2013

	Employment of older people	Older people's education
Indicators	3.1	3.2
Weight	50%	50%
Adjusted (all raw)	35.5	29.8
Normalised	9.2	29.3
Upper goalpost	100	100
Lower goalpost	29	0.7
Geometric Mean	16.4	

Source: ILO (2013)

you were in trouble, do you have relatives and friends you can count on to help you whenever you need them?”. The percentage of people aged 50-plus who responded “yes” to this question determined the value of this indicator. This data is available for countries covered by the Gallup Analytics and is about 55 percent for Iran. The data is given in Table 4.

Indicator 4.2: Physical safety measures how safe people feel when they are in their neighborhood. This indicator was measured by the percentage of people aged 50-plus who responded, “yes” to the survey question: “Do you feel safe walking alone at night in the city or area where you live in?”. According to Gallup, 65 percent of Iranian respondents have answered “yes” The relevant data is presented in Table 4.

Indicator 4.3: Civic freedom measures how much control older people feel they have over their lives. This was measured by the percentage of people aged 50-plus who provided positive response to the survey question: “In this country, are you satisfied or dissatisfied with your freedom to choose

what you do with your life?”. Table 4 shows Gallup Analytics data for Iran which shows that as many as 59 percent report satisfaction with their civic freedom.

Indicator 4.4: Access to public transportation measures access to and quality of public transport which is key to older people’s quality of life. This indicator was measured by the percentage of people aged 50-plus who provided a positive response to the survey question: “In the city or areas where you live, are you satisfied with public transportation systems?” The Gallup Analytics data for Iran implies that close to 71% report satisfaction with their public transport system.

OVERALL INDEX VALUE AND RANKING FOR IRAN

Calculations based on estimates of the four domains of GAWI for Iran show that the lowest score (16.4) is in the domain of capability and the highest (62.2) in the domain of enabling environment. As shown in Table 5, in the two domains of income security and health status of older people,

Table 4
Average values of “Enabling Environment” for each indicator in Iran, 2013

Enabling Environment	Social connections	Physical safety	Civic freedom	Access to public transport
Indicators	4.1	4.2	4.3	4.4
Weight	25%	25%	25%	25%
Adjusted (all raw)	55.0	65.0	59.0	71.0
Normalised	55.0	65.0	59.0	71.0
Geometric Mean	62.2			

Source: Gallup (2013)

Table 5

Iran's index value in 2013: Overall and for each domain

Overall Index	Income Security	Health Status	Capability	Enabling environment
Domains	1	2	3	4
Weight	25%	25%	25%	25%
Value	44.3	47.0	16.4	62.2
Normalised	41.0	51.9	19.9	41.0
Geometric Mean	36.3			

the values of domain-specific indexes are 44.3 and 47.0, respectively, and are close to each other. With these figures, we are able to find the rank of the country globally. However, in order to calculate the final score based on GAWI methodology, it is necessary to convert the scores to normalized data. For this, as in the previous calculations, the value of each domain minus the minimum observed value is divided over the interval of the maximum and minimum. These scores are calculated and are presented in

Table 5. Accordingly, the geometric mean of normalized scores would be 36.3; the score would determine the international position of Iran in GAWI.

The overall index score and ranking of each of the domains for Iran are shown in Table 6 and Figure 2. Rankings are achieved by comparing the relative position based on each domain's score with the other 96 countries included in the 2015 GAWI. By definition, a higher score of the GAWI does not necessarily mean a higher rank, as

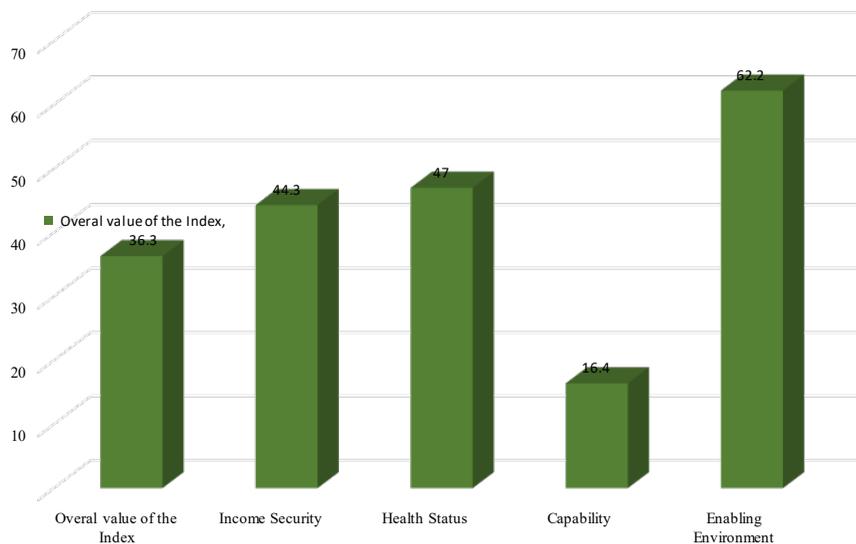


Figure 2. Iran's GAWI score in 2013: Overall and for each domain

the rank depends the spread of the index's score. Although the highest score for a domain belongs to the domain of enabling environment (62.2), Iran's relative position is given by its rank of 64 among 97 countries within this domain. Iran's weakest ranking among these countries is related to the domain of capability, which points to the areas of improvements for Iran in improving its relative position. The same goes for the domain of income security since the country is ranked 72. In terms of older people's health, Iran is ranked 58 among 97 countries which points to better relative positioning than the income security or capability.

The information provided in Table 6 in addition to giving the scores and rankings of countries in the highest 10 and lowest 10 ranks, shows also the six countries with ratings close to Iran. The table thus provides an opportunity to compare Iran with these countries. In general, the final GAWI score shows that Iran is in the middle of the two groups of countries where older persons' life is at very high and very low standard levels. However, comparing Iran with the top 10 countries which are generally developed and developing societies demonstrates that the living conditions of older persons is a bit alarming both in terms of rank and index

Table 6

Rankings and values for Iran (2013) and selected countries (2015): Overall and for each domain

Country/ GAWI Domain	Overall Index		Income Security		Health Status		Employment and education		Enabling environment	
	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value
10 countries ranked at the top:										
Switzerland	1	90.1	27	77.3	2	81.3	2	75.0	1	83.7
Norway	2	89.3	2	89.4	16	73.5	1	76.3	4	80.1
Sweden	3	84.4	7	83.5	12	75.2	5	65.6	6	79.4
Germany	4	84.3	15	80.9	11	75.6	3	68.4	11	78.6
Canada	5	84	10	82.9	4	80.3	10	61.2	9	78.9
Netherlands	6	83.0	5	85.9	13	74.8	12	59.6	5	79.6
Iceland	7	81.8	4	86.6	8	78.2	18	54.5	10	78.8
Japan	8	80.8	33	75.1	1	83.9	7	62.7	21	75
USA	9	79.3	29	76.3	25	70.1	4	65.7	17	76.8
United Kingdom	10	79.2	14	81.5	27	69.3	20	53.6	3	81.8
.										
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Mongolia	72	37.4	31	75.8	93	20.5	64	27.9	62	62.9
Ukraine	73	37	42	70.9	85	27.3	44	34.8	85	54.8

Table 6 (Continued)

Country/ GAWI Domain	Overall Index		Income Security		Health Status		Employment and education		Enabling environment	
	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value
Indonesia	74	36.6	86	19.9	70	37.8	61	28.8	8	79
Iran	--	36.3	72	44.3	58	47.0	88	16.4	64	62.2
Turkey	75	36.3	35	73.6	52	52.5	93	7	40	67.6
Venezuela	76	35.9	66	50.6	29	69.1	51	31.6	93	49.5
Moldova	77	35.1	63	53.4	90	25.8	50	32	76	57.7
.										
.										
10 countries ranked at the bottom:										
Iraq	87	23.2	60	59.1	75	32.8	92	11.9	92	49.6
Uganda	88	23.1	92	15	92	22.1	45	34.4	70	58.9
Rwanda	89	22.7	93	12	81	30	90	13.8	13	78.2
Zambia	90	22.3	89	18.8	91	24.7	67	26.2	84	54.8
Tanzania	91	15.9	94	9.3	69	39.8	89	13.8	88	54.5
Pakistan	92	12.7	95	6.4	78	31.8	70	25.8	81	56
West Bank & Gaza	93	12.3	81	24.7	73	36.6	96	1.8	63	62.3
Mozambique	94	4.5	84	22.8	94	18.9	94	4.5	96	45.1
Malawi	95	4.1	96	5.6	95	18.8	84	19	94	48.4
Afghanistan	96	3.6	83	23.3	96	7.1	91	12.1	95	47

Source: Authors' calculations for Iran, and HelpAge International (2015a)

score. The proximity score in the domain of empowerment with less developed countries and also having a lower score than countries such as Venezuela, Uganda, Zambia and Pakistan further exacerbate existing concerns.

DISCUSSION

Other than many benefits that can be derived from the GAWI, including international comparisons and identification of areas of

differences across countries, the Index has a high potential for providing guidance towards formulation of policies for the implementation of Article 14 of the Islamic Republic of Iran Population Decree on ageing related issues. This Index is also able to monitor the strengths and weaknesses of ageing programmes and is, therefore, a very useful tool for the monitoring and evaluation of the effectiveness of such programmes. In this way, it can help us monitor the condition of older persons and its policy orientation

can highlight the strengths and weaknesses of ageing policies.

The GAWI has its limitations of course. To begin with, it is necessary to point out that as indicated in the 2015 report (HelpAge International, 2015a), the index covers only 97 countries due to lack of access to data. In other words, around half of the countries of the world are not included in this international scale. Another significant limitation is the current inability of the index to incorporate certain issues of ageing such as representing some of the notable discrepancies between and within countries with regard to gender disparities.

Hopefully, over time and with the improvement of ageing studies, the GAWI will be able to provide more comprehensive insights regarding the betterment of older persons' living conditions.

CONCLUSIONS

The main objective of this paper was to calculate the GAWI for Iran and include this country in the list of those considered for international comparisons with respect to the older population's wellbeing. The results of this calculation and comparison – i.e. Iran's overall rank being 76 shared with Turkey among 97 countries – indicates a huge gap with developed countries and also those developing countries whose development index is close to that of Iran. Naturally, bridging this gap necessitates several policy options for older persons in Iran. Firstly, a major challenge in enhancing older people's lives in Iran is over distributing resources equitably and ensuring income security. Although recent findings from

the National Transfers Accounts show that pension coverage will continue to improve in subsequent generations (Koosheshi et al., 2017), promoting the economic wellbeing of older people requires further initiatives. Secondly, comparing Iran's score and rank in the domain of enabling environment with other countries portrays that despite the higher score, the conditions of the country are closer to those countries that have almost no comprehensive ageing plans. Resolving this problem of course requires more determination in provision of facilities based on age-friendly plans. Finally, the lowest score and the most unfavorable position of the country is in the capability domain. However, as explained earlier about pension coverage, the cohort changes are promising in bringing forward changes and improvements in this domain of the GAWI. As generations replace each other in the mid and long term, the ratio of older people with higher education will increase and as the socio-economic conditions of the ageing phase would most probably improve in particular due to increasing life expectancy, older persons will participate more in the labor market.

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Religious Ecologism, A comparative Review of Abrahamic, East Asian and Ancient Iranian Religious traditions

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ABSTRACT

Environmental problems are among the most critical issues in the modern age. Alarms for the destruction of the earth have sparked widespread responses from political and social systems; extensive environmental activities have revealed that environmental protection is not achievable through purely economic, technical, political, or social solutions, but ethical and metaphysical approaches must supplement the movement. In effect, the attempt to protect the environment needs a “metaphysical reconstruction”, as technical, economical, and political methods are not sufficient for provisioning a constructive environmental approach. The comparative study of religions provides the framework for this research in examining the relationship between humans and her/his natural environment from a religious viewpoint. Through the comparative analysis of conceptual, ethical, behavioural, and paradigmatic principles and statements of religions, the formative role of religions on the relationship between humans and the environment is argued and analysed. According to the results, in seismic religions, human has the right to manipulate nature, since he is

the superior creature. In East Asian religions and religious beliefs of Ancient Iran, human beings are among other creatures and not allowed to interfere in their ecosystem. In East Asian religions, the right of nature is superior to the right of humans.

Keywords: Ecologism, religious environmentalism, spiritual ecology, seismic religions, Zoroastrianism

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INTRODUCTION

Environmental problems are one of the most critical issues in the modern age. For almost a century, scientists have been arguing about the detriments of human actions on the environment (Balint et al., 2011). Alarms for the destruction of the earth have sparked responses by political and social systems (Karami, 2016). In this regard, environmental movements encourage society and the social system to pay attention to the environment by either protecting the environment, pressuring governments for accounting environmental issues in policy-making, and, eventually, eliminating palpable human-induced environmental crises from the disaster stage (Dryzek et al., 2014; Lipschutz & McKendry, 2011).

Extensive environmental activities have revealed that environmental protection is not achievable through purely economic, technical, political, or social solutions, but ethical and metaphysical approaches are required to advance the cause (Brown, 2013). The common strategies of verbal and moral recommendations or environmentally-friendly behaviour patterns are not enough to deal with the issue and consciousness about environmental problems does not automatically lead to protective solutions. Protective behaviour towards the environment should be safeguarded by a comprehensive system of attitudes, behaviours, and ethics which leads to environmentalism¹ in which people may

¹ Environmentalism is a political and ethical movement that seeks to improve and protect the quality of the natural environment through changes to environmentally harmful human activities;

have environmental concerns may realise nature's rights or respect nature in some aspect; however, at a macro level, the real linkage constructed between the human and natural world has proved destructive, devastating, and collapsing.

To redeem the disadvantage, some environmental debates have highlighted the importance of political thought which is concerned in political ecology² debate. Political ecology is the study of the relationships between political, economic and social factors with environmental issues and changes.

through the adoption of forms of political, economic, and social organisation that are thought to be necessary for, or at least conducive to, the benign treatment of the environment by humans; and through a reassessment of humanity's relationship with nature. In numerous ways, environmentalism claims that living things, other than humans, and the natural environment, as a whole, are deserving of consideration in reasoning about the morality of political, economic, and social policies (Elliott, 2019). Environmentalism (or environmental rights) is also a broad philosophy, ideology, and social movement regarding concerns for environmental protection and improvement of the health of the environment, particularly as the measure for this health seeks to incorporate the impact of changes to the environment on humans, animals, plants, and non-living matter.

² The term "political ecology" is a generous one that embraces a range of definitions. A review of the term from its early use (first used to describe this kind of work by Wolf (1972) to its most recent manifestations shows important differences in emphasis. Some definitions stress political economy, while others point to more formal political institutions; some stress environmental change, while others emphasise narratives or stories about that change. Even so, there seems to be a set of common elements. The many definitions together suggest that political ecology represents an explicit alternative to "apolitical" ecology, that it works from a common set of assumptions, and that it employs a reasonably consistent mode of explanation (DeCenzo, 2012).

According to this approach, the realisation of environmental protection is subject to the construction of a modest, humble, non-dominant, and non-destructive relationship between “human” with “nature”. In this regard, a novel form of relationship between humans and nature should be considered, which is addressed through ecologism, and distinct from environmentalism³. Ecologism, or green political theory, is generally considered to be an ideological position that advocates a transformation in human-nature relations, challenges anthropocentric values, emphasizes respect for natural limits, and calls for significant social and economic change. However, the term has a range of divergent definitions and can encompass a spectrum of ideas.

This approach centralises the issue of environmental protection as the main subject of politics. Accordingly, the establishment of a balanced relationship between humans and the environment is reachable exclusively through an appropriate political system (Dobson, 2007). But it represents just some facets of reality. Indicating in some research, religious environmental movements are critically important in motivating people to react to climate change and environmental issues (Kearns, 2014).

The religious beliefs rooted in the unconscious mind of societies are key parameters in the construction of

ecological behaviour. From one perspective, shedding semantic light over society, environmental themes of religions bring us to the idea that, aside from green political thought, religious beliefs also influence environmental behaviours. In this regard, attempts to protect the environment and restore the balance and sustainability to the planet possibly may need a “metaphysical reconstruction” as technical, economical, and political solutions are not sufficient for constructing a positive environmental approach (Karami, 2011).

Focused on religion, the development of an original approach for responsible environmentalism and a new set of ecological strategies should be put on the agenda and even deep changes in economic, political, and technological methods are not sufficient to control environmental degradation and pollution. Attitudes about the relationship between humans and nature are socially and culturally constructed and the status of the human on the planet and in the world, along with other beings and with nature, is influenced by religious beliefs, among other factors. Here, we come to the fundamental role of ethical and spiritual infrastructures in the implementation of comprehensive and universal policies for sustainable development-oriented toward environmental preservation.

In this study, through a comparative examination of religions, the relationship between humans and her/his natural environment is examined from the viewpoint of religion. The main question of the study is *how religion affects environmental attitudes*

³ While environmentalism focuses more on the environmental and nature-related aspects of green ideology and politics, ecologism combines the ideology of social ecology and environmentalism (DeCenzo, 2012).

and environmental behaviours and how could we differentiate the environmental approaches of different religions.

METHOD

This study adopted an ecological-anthropological approach and sought to understand how religion affects environmentalism. The research was conducted by hermeneutical phenomenological method, using a text-based technique, and comparative study.

Hermeneutic phenomenology which was introduced by Heidegger (1962) is a kind of interpretation, focused on the historical meaning of experience and its dense effects on humans and emphasizes the meaning which is extracted from the interpretive interaction among the historical texts and its reader. The interpretation Hermeneutic Phenomenology as Gadamer considers is an evolving process of reading, thinking, understanding and interpreting “which is not totally objective, separate or value-free from the user. The focus of this study is “religious texts on environmental issues” and “the readers’ interpretations about these texts” as they understand it and then flow these narratives and believes into their lives. In this study, “religious texts on environmental issues” and “the readers’ interpretations about these texts” as they understand it are basic elements of the study which leads to employing hermeneutic phenomenological method.

In this comparative study, the environmental orientations of religions had been extracted and analysed, based

on the written religious texts of three discussed groups: 1) Semitic religions (Islam, Christianity, and Jews), 2) East Asian religions (Hinduism and Buddhism), and 3) religions and religious beliefs of ancient Iran (Zoroastrians). The holy books of discussed religions (Quran, Old Testament, Genesis, Avesta), as well as the analytical religious textbooks, were the main written texts for analysis.

The holy scripts of argued religions had been studied and discussed in two levels: first, practices which could be addressed as environmental behaviours, and second, religious attitudes that encourage environmentalism and determine the relationship between humans and nature as an indicator of religiosity. To present a clear analytical argument, some theoretical concepts and a brief typology of mentioned religions follow this section.

Along with these, the analytical interpretations of the environmental approach of these religions, which have been written by some theologians and religious experts, were considered. Given this, the verses of mentioned holy books had been reviewed to address the environmental approaches of these religions.

Through the comparative analysis of conceptual, ethical, behavioural, and paradigmatic principles and statements of each religion, the role of religions on the relationship between humans and her/his natural environment was argued and analysed. A comparative study was conducted to understand:

- How do religions' approaches affect the relationship between humans and nature?
 - How is the relationship between humans and the environment constructed?
- and,
- How does human perception about her/his place in the world (in a religious approach) affect her/his exposure to nature and the environment?

Religion, Environment, and Ecology⁴

Religions affect social life by influencing two spheres: "behaviours" and "attitudes". Religion is the cultural inspiration of most modern societies and human behaviours in the realm of social life are constructed based on religious beliefs. Religious beliefs, which are introduced, advised, and recommended in the form of religious statements, religious practices, religious obligations, ethics or moral propositions, obviously or implicitly, motivate and determine behaviors.

Religious attitudes affect people's observations and determine their behaviours. This can include appreciation and compassion and, in the words of William James, a sense that "great and

wondrous things are in the air" (James, 1987). Addressing the humans' status in the world is one of the fundamental attributes of religions which recommends the human how to behave in the face of nature. Religion lights the way in which human relates himself to nature in two levels: i) practices and ii) attitudes. Having intervened religion in the relationship between human and nature, it is worth mentioning that this ecological link is influenced by religious practices (behaviours and practices recommended to bring equilibrium to the relationship with nature) as well as religious attitudes (which represents how the position of the human in nature is represented by religion).

Religions, on the one hand, introduce special codes of conduct regards with the environment, and, on the other hand, prescribe how humans behave in the world and how they conduct their manner with nature. Religion is an important interfering factor to understand the relationship between human and nature, for several reasons:

1. Religion is a prominent issue of human society and is one of the main components of cultures. Religion is not summed up in religious rites; as the history of many centuries of religion's presence in human civilisation evidence, not only religious rituals but also religious attitudes shape the identical dimension of human social life. There is no society without religion, and even in primitive societies, religion is an essential cultural element that influences

⁴ Ecology is the branch of biology which studies the interactions among organisms and their environment. Objects of study include interactions of organisms with each other and with abiotic components of their environment. Ecology is not synonymous with environmentalism, natural history, or environmental science. It overlaps with the closely related sciences of evolutionary biology, genetics, and ethology. An important focus for ecologists is to improve the understanding of how biodiversity affects ecological function.

- attitudes and behaviours.
2. Prophecies and religious beliefs exist in the unconscious memory of societies and give them social and cultural content. Therefore, even in a social system with less attention to religious rituals, religion is a key factor in shaping behaviours and attitudes.
 3. Religious beliefs, whether in form of religious or moral propositions, or in the form of their ecological approach, establish the relationship between human and environment, determine how to view nature, how to communicate with it, how to use it, and, in general, where human is located as part of the nature.
 4. Political and economic institutions are not sufficient to establish a balanced relationship between humans and nature. The institution of religion has a powerful influence in constructing behaviours towards the environment.
 5. Environmental ethics, which is one of the major environmental protection strategies, guides us to focus on religion as a protective solution.

Typology of Religions

To understand the ecological approach of religions and to understand how the relationship between humans and nature is constructed, a comparative study has been done in three groups of religions. Each of these religions, based on their historical,

identical, and cultural status in societies, is one of the important identical societal layers which somehow determine the socio-cultural identity of the Iranian society.

1. Semitic or Abrahamic religions, including Judaism, Christianity, and Islam, are an important feature of the cultural and social context of Iran; the cultural-religious identity of a society is constructed through the meaning system of these religions. Being located in the Middle East -the origin of Abrahamic religions- makes these religions key to shaping the cultural identity of the society. The long history of Abrahamic religions in the region, and the cultural dominance of Abrahamic religions globally and in Iran, make the identity given by these religions a crucial component in any study of religion.
2. Religions of ancient Iran form the historical identity of Iranians. The ancient Iranian religions, in addition to being part of Iranian society, are part of the historical identity of the Iranian community due to civilizational attachments of identity. Religions of ancient Iran are still represented in some parts of society and reflect an important part of the semantic religious identity of Iranians.
3. East Asian religions, including Hinduism and Buddhism, are considered “religions in the shade”

in the semantic system societal identity of Iranians and play a key role in Iran as an alternative religion. We name it “religion in the shade” because it has shadowed religious-Islamic attitudes in Iranian society and has affected people’s perception of religiosity both historically and contemporarily. The internalisation of religion and religious spirituality instead of giving up the official religious rites, plus the interpretation of religion based on internal perceptions, instead of measuring religiosity based on religious rituals as the main component of Eastern religions, have made these religions the “religion in the shadow” in Iranian society.

Historically, the presence of believers from East Asian religions in the cultural, semantic, and social context of the Iranian community during the Mongol era led to the formation of a cultural-semantic identity in the Iranian community⁵. East Asian religions, although not recognised as an official religion in Iranian society, have left their influence on the semantic context of the community.

These religions, and the intellectual and spiritual atmosphere caused by them, have also influenced the content of some religious

sects⁶ and have brought the semantic system of these religious sects closer to the semantic system of East Asian religions (Ziaei, 2016). At the same time, in the contemporary life of Iranian society, the orientation towards East Asian religions can be observed in the form of new religious movements (the new mysticism, for example).

Conceptual Considerations

The ecological approach of the religions introduced in the previous section are analysed based on two axes:

1. Environmental behaviour codes that are recommended by religions and observe environmental behaviours;
2. The definition of the status of the human in the universe based on these religions.

Therefore, religious ecologism is constructed based on two components and two main questions:

- What are the recommended environmental behaviours in these religions?
- What is the status of the human in the universe based on these religions?

Environmentalism in religions, and the status of the human in the world (determines how people are related to the environment), represents spiritual ecology⁷.

⁵ Some researchers believe that because of similarities between East Asian religions and Iranian sects, like Sufism, the Mongols accepted Islam as their formal religion (Ziaei, 2016).

⁶ Sufism

⁷ Spiritual ecology is an emerging field in religion, conservation, and academia, recognizing that there is a spiritual facet to all issues related to conservation, environmentalism, and earth stewardship. Proponents of Spiritual Ecology assert a need for contemporary

“The Place of Human in the World” Based on Concerned Religions

Humans’ relationship with the world is determined by the role individuals assume for themselves based on their religious or ideological attitudes. Humans behave based on the criterion of their status in the world. Part of this worldview is shaped by the religious approach to human status in creation. Religions describe the position of the human in the world and teach humans what their role among other beings is and what place they occupy in relation to nature and other beings. This notion of human-nature relations is called ecology. Ecology deals with how humans relate to nature determine how this relationship plays a role in protecting nature, and at what level it is destined to destroy it.

Semitic Religions. In Sami religions, there are two main axes that represent the status of the human in nature:

1. belief in the superiority of human over all creatures;
2. belief in conquering dominance of human beings over nature.

In Semitic religions, the human being is superior to all creatures. This approach places human beings in a position beyond all creatures and all creatures are under human control. In the holy book of Islam, it is mentioned that: “The Lord created human, created heaven and earth and ordered the cosmic system to follow and conservation work to include spiritual elements and for contemporary religion and spirituality to include awareness of and engagement in ecological issues (Sercey, 2007).”

prostrate him” (Quran 1: 34). With respect to Abrahamic religions, “All beings have been commanded to obey human and prostrate him” (Quran 1: 30-33).

In Semitic religions, human is generated from nature (natural components), but nature intrinsically is naughty, evil, submissive, and low-value. Based on this approach, human has been promoted to the position of superior of all creatures due to the Spirit of God in him. During her/his life, he has always consisted of these two natural and spiritual parts; her/his natural part is her/his submissive and low-value part in the human biological system. This approach considers nature to be despicable and worthless.

In Christianity, also, human is superior to nature and all creatures. Among the creatures, it is only humans who are created like God, while the rest are inferior to him. In Christianity, mankind is also promoted to the status of the Holy Spirit.

In the Old Testament, it is said that human is a creature created by God and like Him. The divine form of human is not transversal, but her/his intrinsic features. Verse 1, which is very important in understanding the Christian view of the nature of mankind and the status of the human in nature, reads, “human is created in the image of God and in the likeness of him”; even after sinning, the image of God in her/his identity remains.

In Judaism, God congratulates himself for the creation of the new existence, and in Genesis (1: 27) it is stated that God has created humans like himself. In some respects, humans are superior to animals and

animals are superior to plants and plants are superior to idle things. Therefore, the human is the superior of all the lower creatures and beings, has the priority over them, is created in the form of God (Genesis 1: 26-27), and he is commanded to fill the earth, dominate it, and rule all creatures (Ibid).

Semitic religions recognise nature under human domination. While interpreting verses 32-34 of Ibrahim Sura, referring to the fact that the word “domination” is repeated four times, it is clearly stated that all beings are under human domination. In Islam, human’s relationship with nature is a captive/dominative relationship (Amoli, 2008).

Ancient Iran Religions (Zoroastrianism).

To understand the status of the human in nature in the Zoroastrian tradition, it should be noticed that the attitude of Zarathustra to the universe is based on the adherence to the Asha law⁸. According to Asha Law, “Great Lord of Life and Wisdom” has created the world based on a normative principle that governs all beings and creatures. This norm and organised rule is named Asha by Zarathustra. The steadfastness of Asha on the world reflects the will of the Great Lord. So far, this law is similar to the Abrahamic religions, who believe that the world is deployed based on divine order and tradition. However, the difference between

Zoroastrianism and the Abrahamic religions begins when Zoroastrianism declares that human must coexist with this cosmological norm.

The law of Asha is the coordinating force of the universe and humans must be coordinated with it. According to the law of Asha, a human must coordinate nature, not dominate it. Given that these Iranian religions have emerged in a historical period when natural resources were abundant, religious texts of ancient Iranian religions have not given any mention of the constraints on natural resources and consumption; rather, they have recommended controlled consumption.

In religions and beliefs of ancient Iran, nature is scared but the approach to plants and animals is neither self-possessive nor worshipful; therefore, human beings can consider their safety and well-being without looking after other lesser creatures. The infinite praise of the elements of nature in the religions and beliefs of ancient Iran leads to a balanced life of a human with nature. Despite respect for other organisms, believers can eliminate them if they harm human beings. For this reason, in the Zoroastrian religion, the killing of insects that are detrimental to human comfort is not forbidden and is even promoted.

The exploitation of land and nature is also a reprehensible act. In exploiting nature, humans have balanced privileges with other creatures. In ancient Iranian belief, an environmental perspective is based on the inherent value of nature, not the interests of humanity. Although this intrinsic value

⁸ Asha (/ˈɑːʃə/; aša) is the Avestan language term for a concept of cardinal importance to Zoroastrian theology and doctrine. In the moral sphere, aša/arta represents what has been called "the decisive confessional concept of Zoroastrianism" (Duchesne-Guillemin, 1963; Lommel, 2013).

is not emphasised, respect for nature in the religions and beliefs of ancient Iran is not due to the risk of human consumption.

East Asian Religions. In Upanishads, there is a narrative that likens human beings to trees. In Upanishads, like other religious texts of East Asian religions, many symbols of nature are introduced, However, what matters about them is not the abundance of narratives, but that these religions recognise human as a partner of nature, and, in some cases, consider human as equivalent to it. In Eastern religions, nature is beyond human, and human beings have no right to interfere in it.

East Asian religions are manifold and vary from “admission” to the “absolute worship of nature”. Here, nature and other beings are promoted to the stage of worship and human status is lower than other beings. According to this view, to protect nature and life on the planet, this is human, who must be humble towards nature and should give up the domination of living beings.

Due to the humble position of human versus nature, human exploitation of nature is very cautious, reliant on extreme avoidance of natural resources, and limited to minimal consumption. In East Asian religions, nature is built on an integrated balance. A human is only a small part of this equilibrium, and without it, the balance of nature is not interrupted. It is human exploitation of nature that disturbs this balance. It's not nature that prostrates in front of a human, but the other way around. The extent of this humility and submission

in front of nature can be seen when humans are absolutely surrendered to animals (such as in India, where all animals are sanctified). This is absolute surrender to the extent that even if human beings are harmed by other organisms, they have no right to harm them, even if on the defensive.

Environmentalism in Religions (According to Religious Behaviours)

Religious ethics and religious propositions demand followers to perform religiously accepted behaviours. Religions advise their followers to maintain a particular lifestyle in the form of moral propositions or codes of conduct. Social affairs and the lives of followers are managed by religions as well as the way people behave in social life. In this way, religions have a set of ethical propositions and codes of conduct that advise followers to protect the environment. These codes of conduct and moral propositions can be considered as criteria for environmentalism in religions.

Religious Environmental Behaviours in Semitic / Abrahamic Religions. In Semitic religions (Judaism, Christianity, and Islam), many recommendations have been made regarding environmental protection, respect for natural rights, respect for animal rights, respect for plant rights, respect for nature and protecting it, and avoidance of behaviours which damage or destroy.

The approach of Abrahamic religions to protect the environment is basically ethical and is presented within the framework of ethical recommendations and value

propositions. In Abrahamic religions, recommendations to limit natural resource exploitation and encouraging environmental protection is within the scope of ethical recommendations, not compulsions.

These ethical recommendations are limited to specific areas of the environment and do not include all dimensions of the environment. In this approach, ethical recommendations for protecting the environment include areas that are useful to humans. Tolerance and kindness with animals include animals that are beneficial to humans and protecting the environment is limited to planting and preserving trees, which are beneficial to humans.

Although these issues confirm that Semitic religions emphasise environmental protection, the approach to environmental protection is sometimes so reductive that the environment is considered equivalent to 'cleanliness', 'purity', and 'health' (Amoli, 2013).

In short, in Semitic religions, moral propositions in the field of the environment eventually lead to human benefits and interests. Respect of nature and the environment is valuable and recommended because it is essential for human life, survival, and comfort. Therefore, the rights of nature must be respected and protected so that human life persists.

In Semitic religions, it is 'the right of nature' that is respected, not 'the right to nature'. The human being as the most powerful creature gives some of nature's rights in return for nature to provide him to meet her/his needs; however, human has no

obligation to provide "the right to nature". Actually, 'right to nature' is resultant from 'the right to the human' (Ibid).

Religious Environmental Behaviours in Ancient Iranian Religions. Religious propositions on the environment in ancient religions emphasise obligatory environmental protection. In Zoroastrianism, the observance of the rights of nature goes beyond the moral advisory propositions and is obligatory; the sacredness of the four elements of water, wind, soil, and fire is inhibited, and preservation of the environment is obligatory for Zoroastrians.

Nature was worthwhile and respectful to the ancient Persians and enjoyed special respect. Iranians considered the four elements of water, fire, wind, and soil, and had hymns to praise each: *Aban Yasht*⁹ is praise of water, *Hwarshed Yasht*¹⁰ is praise of the sun, *Tishtar Yasht*¹¹ is praise of rainfall and fertility, and *Zam Yasht*¹² is

⁹ Aban Apas (āpas) is the Avestan language term for "the waters", which, in its innumerable aggregate states, is represented by the Apas, the hypostases of the waters (Encyclopaedia Iranica).

¹⁰ Hvarə.khshaeta (Hvarə.xšaēta, Huarə.xšaēta) is the Avestan language name of the Zoroastrian divinity of the "Radiant Sun" (Wikipedia).

¹¹ Tishtrya (Tištrya) or Roozahang is the Avestan language name of a Zoroastrian benevolent divinity associated with life-bringing rainfall and fertility. Tishtrya is Tir in Middle- and Modern Persian. As has been judged from the archaic context in which Tishtrya appears in the texts of the Avesta, the divinity/concept is almost certainly of Indo-Iranian origin (Encyclopaedia Iranica).

¹² Zam (Zām) is the Avestan language term for the Zoroastrian concept of "earth", in both the sense of land and soil, and in the sense of the world. The earth is prototyped as a primordial element in Zoroastrian

praise of what is related to “earth”, in both the sense of land and soil and in the sense of the world. Based on this latter *yasht*, the earth is prototyped as a primordial element in the Zoroastrian tradition.

In Iranian ancient religions, natural resources have been respected and of immense importance. Xenophon quotes that Xerxes, while passing through Anatolia and observing a beautiful forest, ordered the construction of a club and the deployment of soldiers to protect it. This is the world’s first preserved area. These religions introduced punishments for pollution of water and land, and Zoroastrians insisted on keeping clean the water, soil, air, and fire. Herodotus and Xenophon had quoted that Iranians did not throw anything dirty in water, and took care to keep the soil, land, and water clean (Mehr, 2008).

Xenophon, an ancient Greek historian, quoted in her/his book about Cyrus 2600 years ago, “children brought their own bread and vegetables from their homes, as well as a container for drinking water. Whenever they were thirsty, they sipped from the river’s water. Iranian children were taught in their schools to drink river’s water with their water container” (Xenophon, 1914 (370BC)). He also said that even today, it was a great sin to spit on the land or to blow nose. Iranians consider it disrespectful to the land.

An important example of nature’s appreciation by believers of ancient religions

tradition, and represented by a minor divinity Zam, who is the hypostasis of the "earth". The word itself is cognate to the Baltic 'Zemes' and Slavic 'Zem', both meaning the planet earth as well as soil (Wikipedia).

and beliefs is the celebration of Nature or Nowruz, which is the day of planting trees and is celebrated as the beginning of the New Year. Trees and plants were respected in the religions of ancient Iran. Whenever a baby was born, a tree was planted for his/her sake and it was called after him or her. These were the holy trees.

In ancient Persia, many trees were of noteworthy value, and, even now, there are many surviving trees all over the country that have kept their holy aspects (Sarve-e-Abarkuh¹³ & Sarv-e-Manjil¹⁴).

Religious Environmental Behaviours in East Asian Religions.

In Eastern Asian religions, an offense to nature is condemned. In these religions, behaviour towards nature is conducted by the capacity of the environment, which itself determines its needs. Environmental viewpoint is defined as “attention to the intrinsic value of nature, regardless of its interest in human.”

Consumption in East Asian religions is also condemned, imposing restrictions on human consumption. In East Asian religions, humans are not allowed to hurt animals or use other living things for their well-being. In extreme cases, even if animals hurt humans, humans do not have the right to interfere in natural processes for retribution.

¹³ The Cypress of Abarkuh, also called Zoroastrian Sarv is estimated to be between 4000 to 5000 years old and is a holy tree located in Abarkuh in Yazd Province of Iran. It is said it was first planted by Zoroaster.

¹⁴ The Cypress of Manjil is a holy trees located in Manjil; a city in the Central District of Rudbar County, Gilan Province, Iran.

RESULTS

When comparing the three groups of religions, the Abrahamic religions, including Christianity, Judaism, and Islam, generally considered the nature inferior to humans and because of the priority of the human allowed him/her for any interference into nature. Although in these religions, the law of nature is commanded to be respected, but these are ethical recommendations and necessarily do not lead to objective environmental behavior. A human can conquer nature and use it for his own benefit and is more precious than other beings.

In contrast, the ecological approach of East Asian religions was different. In this approach, human was served by nature and in comparison with Abrahamic religions, the priority was given to nature and other non-human beings. Also in these religions, the relation between humans and nature was not balanced and nature was preferred to humans.

According to the results of this study, in the ancient religions of Iran, there was a balance between humans and nature. Human rights could not be ignored in favor of nature and nature's right was not ignored either. Human did not have the right to conquer nature and to exploit it without regard to the rights of nature and the human right to exploit nature must not be ignored.

DISCUSSION

The main focus of this discussion was to examine the role of religion in the relationship between humans and the environment/nature. Based on a comparative

comparison of three groups of religions, the discussion attempted to understand whether religions affected their followers' environmental approach or not. We observed that religions affected environmental behaviours in two ways: 1- Ethical religious propositions recommend conservation of the environment; 2- They promote environmental protection by determining the status of the human in nature.

Based on a comparative study, three groups of religions were examined and, by referring to the written texts of these religions and based on the two axes above, the impacts of these religions on the environmental approach of their adherents were examined to conclude the following.

All religions recommend environmental behaviours. In all religions, the rights of other living beings and nature have been revered and they acknowledge that nature is worthy and should be respected. All religions have ethical recommendations for observing the rights of nature and the environment.

In some religions, environmental recommendations are compulsory, and nature and its betterment are prioritised. In establishing the balance between humans and nature, the rights of other living beings are prioritised to the rights and will of a human.

In some religions, environmental advice is ethical, but not obligatory. Recommended environmental behaviours are purely advisory and ethical and are centred on human interest. However, in others, environmental advice is both ethical and

compulsory, and both human and natural benefits and rights should be preserved.

Sometimes, the human’s relationship with nature is an interactive and non-dominant relationship. Human is a living person like other beings and does not have the right to dominate nature. The relationship between humans and nature is based on rapprochement, cooperation, and coexistence. This is demonstrated in Table 1.

Based on this comparative study, the human-nature relationship is significant at three levels:

1. In religions of ancient Iran, the relationship between humans and nature is a balanced relationship; it is profitable and non-destructive. Both humans and nature enjoy

balanced rights, and there is not a dominant relationship between them. See Figure 1 for the illustrated information.

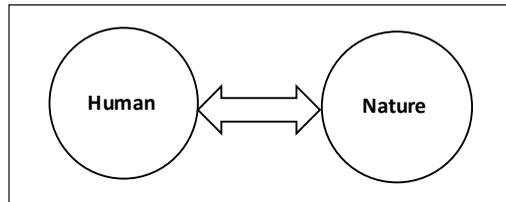


Figure 1. The relationship between religion and environment in ‘religions of ancient Iran’

2. In Semitic (Abrahamic) religions, human is superior to all creatures and nature is under the control of mankind. Human beings have the right to seize the abundant

Table 1
Comparative table on a religious environmental approach

Ethical recommendations	Consumption/Resources	Relation with nature	Religion
The observance of the rights of nature is optional.	Consumption is unlimited. Resources are unlimited.	Human is the owner of Nature. Human is worshipable Human is the superior of all creators Nature is for humans Nature must be dominated.	Abrahamic Religions
The observance of the rights of nature is compulsory.	Consumption is unpleasant. Resources are limited.	Human is not the owner of Nature. Nature is worshipable. Human is one among creatures. Nature is for humans. Nature must be respected.	East Asian Religions
The observance of the rights of nature is compulsory.	Consumption is subject to resources. Resources are limited.	Human is not the owner of Nature. Nature and humans should interact. Human is one among creatures. Nature and humans co-exist. Nature must be respected.	Ancient Iranian Religions

nature and exploit it for their own interests. Human can invade the wilderness and dominate nature. This is reflected in Figure 2.

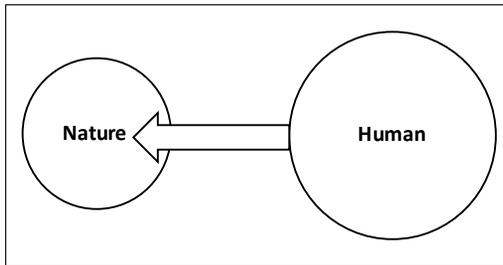


Figure 2. The relationship between religion and environment in 'Semitic (Abrahamic) religions'

3. In East Asian religions, the relationship between humans and nature is a balanced relationship, but the balance in nature does not depend on the existence of mankind. With the removal of humans from nature, the balance does not coincide. Nature and other living things have priority over humans. Nature dominates humans, and humankind must be humble in front of it. Figure 3 demonstrates the relation between humans and nature in East Asian religions.

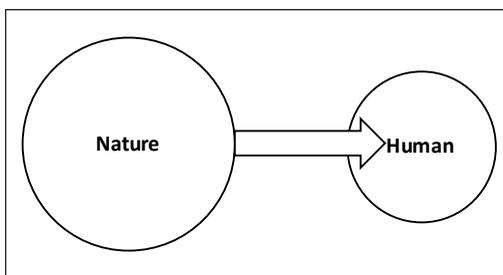


Figure 3. The relationship between religion and environment in 'East Asian religions'

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Environmental Education in Social Sciences Textbooks of Senior High Schools in Iran

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ABSTRACT

Considering the important impact of education on socializing students and preparing the new generation for roles in local, national, and international societies, the educational system is expected to pay special attention to environmental education (EE) in textbooks. The purpose of this study is to investigate the role of EE in social sciences textbooks (SST) in Iranian senior high schools. The research method used was a quantitative content analysis of all SST in senior high schools (3 volumes) during the 2017-2018 academic year. Sentences were used as the analysis unit, and textbook content was divided into four sections based on the cutting operation: text, picture, question, and activity. Shannon entropy method was used for analysing the data. The most significant results indicate that there is no balanced and comprehensive attention given to EE in senior high school SST. The most consideration for EE was found in 11th grade SST and the highest weight was related to noise pollutants and environmental protection in the Constitution.

Keywords: Environmental education, quantitative content analysis, senior high school, social sciences textbooks

INTRODUCTION

All over the world, the education system, as an organization that prepares students to enter the society, should help to solve environmental challenges in order to fulfil

its social responsibility. As part of the structure of a centralized education system, textbooks are used as the most important tool for transferring concepts, meanings, and values to students (Amini & Mashallahi, 2015).

In all countries, during recent years, environmental education (EE) has been at the centre of international and national policies. Many researchers and experts from many countries have developed significant debates on EE educational

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programming and proposed methods. However, the 1970s are epitomized by the prolific growth of EE in the world. This was an era of exuberant capacity building for the field. The momentum of the legislation and activism of the 1960s continued to build on both national and international levels (Disinger, 2001). According to some educators and scholars EE is defined as:

... A continuous activity by which the educational society takes into account the global reality, the types of relationships that human beings establish between themselves and nature, the problems which result from those relationships, and their fundamental causes. It is developed through practice which links the learner to the society, values, and attitudes that promote behaviours directed towards the transformation of that reality, in both environmental and social terms, and develops in the learner the skills and attitudes needed for that transformation'. (Teitelbaum 1978 as cited in Gaudiano, 1999)

Generally, it teaches the concept of individual responsibility and, similar to traditional education that appreciates law and order or religious education that promotes morality, this kind of education focuses on the fundamental aspects of the environment (Orr, 2009). According to Martin, it is proven that the implementation of EE in many national contexts is a complicated process:

.... if we do accept a more socially analytical approach to environmental education, this has its own problems within the formal education system. The overt or critical stance to social values and ways of life can create concerns about motivations, objectivity, and sometimes relevance to what most teachers think they ought to be doing. Using education to challenge, even alter, social attitudes and values and thereby socio-economic systems—particularly if these are preconceived—poses enormous issues of acceptability from teachers, school managers, parents, and the local and central government'. (Martin, 1996)

One of the main elements of EE, not only in a local and national view but also in a global, human, and environmental context is curriculum (Slattery & Rapp, 2002; Nussbaum, 2006). Efforts should be made to include the importance of EE, its protection, and its revival into curricula to change the learner's cognitive, effective and participatory knowledge, skills and behaviour (Carleton-Hug & Hug, 2010). EE taps into a broad range of source disciplines for its content. Science, mathematics, language arts, social sciences, politics, and philosophy make up just a part of the mix. It also draws from a broad base for its pedagogy (Carter & Simmons, 2010). The integration of EE with social studies has also attracted the attention of scholars due to the nature of this field, namely, helping

students become socialized (Shobeiri & Shamsi, 2015).

The results of a study carried out by the British Council of Environmental Education (2004) indicated that only 17 percent of schools were involved in EE, and just 2 percent of schools had adopted a strategy and plan for EE. Tomlins and Froud (2005) investigated more than 4,000 secondary school students and found that 25 percent of schools had curricula related to EE, and 42 percent of them lacked EE. According to the study that Bradley et al. (1999) carried out in Texas, USA, there are significant differences in knowledge gain and attitudes of students after exposure. Students' environmental knowledge scores increased by 22 percent after they completed the environmental science course. In addition, students' environmental attitudes became more environmentally favorable. Students having higher knowledge scores had more favorable environmental attitudes compared with students with lower knowledge scores. Omran et al. (2017) reviewed sixth-grade elementary school textbooks in Iran and concluded that there was no balanced and comprehensive attention given to EE components within the textbooks. Ali et al. (2017) investigated 1,200 secondary school students in Nigeria and the results showed that the students had low environmental awareness levels.

Iran Context

The structure of general education in Iran is centralized and compulsory education begins at 6 years old. The Organization for

Educational Research and Planning, which is under the supervision of Iran's Ministry of Education, compiles the textbooks. Iranian textbooks have changed two to three times over the last forty years. The most recent change was during the 2010-2011 academic year when the structure of the educational grades was changed. Educational grades in Iran were as three grades, included elementary (5 years), middle (3 years), and high school (3 years) which has changed to two grades, elementary (6 years) and secondary (junior high school: 3 years include 7th, 8th, and 9th grades and senior high school: 3 years include 10th, 11th, 12th grades) (Motamedi, 2012). Based on these changes, textbooks were gradually reviewed to meet the needs of both younger generations and social and international changes. The environmental issue is an important subject in Iran as environmental protection is considered as a public responsibility in Article 50 of the Constitution of the Islamic Republic of Iran; furthermore, environmental issues are implicitly included in science and social science courses in elementary and secondary schools. There is no separate curriculum for EE. However, in the 2017-2018 academic year, the textbook "Human and Environment" entered into the Iranian general education system for the first time as a textbook for the 11th grade of senior high school.

On the other hand, in the last few decades, Iran has faced serious environmental issues, such as increasing rates of air pollution in metropolitan areas (Holizadeh et al., 2009), air pollution caused by dust particles in

southern cities (Delangizan & Motlagh, 2013), deforestation, and soil erosion (Vlayati & Kadivar, 2006).

It is necessary to consider environmental issues in the formal curriculum. The social sciences textbooks (SST) are chosen for this analysis because, in recent years, environmental challenges such as increasing air pollution, continuity of droughts, shortage of water resources, and invasions of dust particles from neighbouring countries have emerged as a social issue among Iranians. SST was chosen as the target population to identify the status of EE in textbooks with the following questions in mind:

1. To what extent has EE been addressed in 10th grade SST?
2. To what extent has EE been addressed in 11th grade SST?
3. To what extent has EE been addressed in 12th grade SST?
4. To what extent is EE taken into account in senior high school SST?

MATERIALS AND METHODS

The research method is descriptive, using quantitative content analysis methods in order to evaluate senior high school SST for the main indicators of EE. The indicators of EE include environmental protection, man-made environment protection, water pollutants, soil pollutants, air pollutants, sound pollutants, industrial pollutants, environmental pollution and its relation to human life, environmental pollution and its relation to the life of plants and animals, environmental protection in the constitution.

The statistical population consists of all senior high school SST (3 volumes) in the 2017-2018 academic year. Due to the limited statistical population, sampling was discarded and the whole population (i.e. a census) was used as the sample. The content of SST was divided into four sections based on the cutting operation: text, picture, question, and activity. Next, the main indicators of EE were analysed in each of these sections. Sentences were used as the unit of analysis for text, question, and activity. The unit of analysis for pictures was the pictures themselves. After the cutting and classification operations, the calculations of selected indicators for each section were carried out. Each of these units was placed in the relevant table and the number of corresponding units was written in front of them. To assess its validity, the opinions of six experienced teachers (each with over 20 years of work experience) and two environmental experts were used, and test-retest correlation was used to measure their reliability. Therefore, after two studies on senior high school SST with a week between each study, the correlation coefficient among the counted frequencies was 0.89 which is computed as:

$$\frac{0.87 + 0.91}{2} = 0.89$$

The content of senior high school SST is based on three resources (10th, 11th, and 12th grade textbooks), the targeted concept (EE), and the components (respectively, 1. environmental protection, 2. man-made environment protection, 3. water pollutants,

4. soil pollutants, 5. air pollutants, 6. sound pollutants, 7. industrial pollutants, 8. environmental pollution and its relation to human life 9. environmental pollution and its relation to the life of plants and animals 10. environmental protection in the constitution). The Shannon Entropy Method was used to analyse the data by using EXCEL software.

Shannon Entropy

This method is based on systems theory and is well known as a compensatory model. The entropy in information theory is a standard for the uncertainty value, which is expressed by a discrete probability distribution (p_i). This is so the uncertainty value, with balanced distribution, is greater than the cases where the frequency distribution is sharp (Shannon, 1948). For the uncertainty value, we first calculate the symbol E as described below:

$$E = -K \sum_{i=1}^n [p_i \cdot \text{Ln}(p_i)] \quad (1)$$

In the above equation, the variable K is a positive constant for providing $1 \geq E \geq 0$ from the probability distribution (p_i) calculated by the statistical mechanism. If the (p_i)s are equal to each other, it has the least possible value (0.000001).

$$-k \sum_{i=1}^n [p_i \cdot \text{Ln}(p_i)] = -k \left\{ \left(\text{Ln} \frac{1}{n} \right) \left(\frac{n}{n} \right) \right\} = -k \text{Ln} \frac{1}{n} \quad (2)$$

A decision matrix contains information that indicates entropy can be used as a criterion for evaluation, as demonstrated in the matrix in Table 1.

Table 1
Decision matrix

	X_1	X_{2l}	.	X_n
A_1	r_{11}	r_{12}	.	r_{1n}
A_2	r_{21}	r_{22}	.	r_{2n}
.
.
A_m	r_m^1	r_m^2	.	r_{mn}

In the matrix shown in Table 1, A_m represents the options that need to be ranked, X_j represents the categories that the evaluated options are based on, and r_{ij} represents the value of each indicator corresponding to each option. The information obtained from this matrix (p_{ij}) is as follows:

$$p_j = \frac{r_{ij}}{\sum_{i=1}^m r_{ij}} \quad (3)$$

For E_j from the p_{ij} collection, the equations for each characteristic are:

$$E_j = -K \sum_{i=1}^n [p_{ij} \cdot \text{Ln}(p_{ij})] \quad (4)$$

$$-k = \frac{1}{\text{Ln}(m)} \quad (5)$$

Next, the uncertainty or degree of deviation (d_j) of the information created for index j is:

$$d_j = (1 - E_j) \quad (6)$$

Finally, the authors have used the existing index for weights (w_j):

$$w_j = \frac{d_j}{\sum_{j=1}^n d_j} \tag{7}$$

Finally, it can be stated that the Shannon entropy method is used to rank the different indices using the importance coefficient and this allows the scattering of important information more accurately understood.

RESULTS AND DISCUSSION

The First Question

Of the sum total of 2534 units identified for 10th grade SST, only 28 units had been allocated to EE, indicating that EE in 10th grade SST was not adequately considered. The most consideration for EE ($p_{ij}= 16$) was in the first chapter of this book and the highest weight ($w_j= 0.18$) was related to water pollutants, air pollutants, noise pollutants, industrial pollutants, and environmental protection in the Constitution. It can be concluded that the highest neglect towards EE was in these

components. EE was not a priority in 10th grade SST and a proportion of curriculum content should be included in these books (given in Table 2).

The Second Question

Of the sum total of 3212 units identified for 11th grade SST, only 62 units were allocated to EE, indicating that EE in 11th grade SST was not adequately considered. The most consideration for EE ($p_{ij}= 45$) was in the third chapter of this book and the highest weight ($w_j= 0.14$) was related to noise pollutants and environmental protection in the Constitution. It can be concluded that the most neglect towards EE was in these components. EE was not a priority in 11th grade SST and a proportion of curriculum content should be included in these books (given in Table 3).

The Third Question

Of the sum total of 3324 units identified for 12th grade SST, only 50 units were allocated to EE, indicating that EE in the 12th grade SST was not adequately considered. The

Table 2
Decision matrix of EE in SST of 10th grade

Components		1	2	3	4	5	6	7	8	9	10	p_{ij}
Resource												
10 th grade (n= 2534)	Chapter One	3 (0.60)	2 (0.66)	1 (ε)	3 (0.75)	1 (ε)	1 (ε)	1 (ε)	1 (0.33)	2 (0.67)	1 (ε)	16
	Chapter Two	2 (0.40)	1 (0.34)	1 (ε)	1 (0.25)	1 (ε)	1 (ε)	1 (ε)	2 (0.67)	1 (0.33)	1 (ε)	12
	Sum	5	3	2	4	2	2	2	3	3	2	28
	E_j	0.97	0.92	(ε)	0.81	(ε)	(ε)	(ε)	0.92	0.92	(ε)	
	d_j	0.03	0.08	0.99	0.19	0.99	0.99	0.99	0.08	0.08	0.99	
	w_j	0.005	0.01	0.18	0.03	0.18	0.18	0.18	0.01	0.01	0.18	

Note. Normalized Data is in Parentheses, E_j : degree of Entropy, d_j : degree of diversification, w_j : degree of Weight ε: 0.000001, & Numbers Represent EE Components.

Table 3
Decision matrix of EE in SST of 11th grade

Components		1	2	3	4	5	6	7	8	9	10	p_{ij}
Resource												
11 th grade (n= 3212)	Chapter One	1 (0.12)	2 (0.66)	0 (0.00)	0 (0.00)	0 (0.00)	1 (ϵ)	0 (0.00)	3 (0.25)	3 (0.37)	1 (ϵ)	11
	Chapter Two	2 (0.25)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	2
	Chapter Three	5 (0.63)	1 (0.34)	3 (0.75)	6 (0.85)	5 (0.83)	1 (ϵ)	9 (0.90)	9 (0.75)	5 (0.63)	1 (ϵ)	45
	Chapter Four	0 (0.00)	0 (0.00)	1 (0.25)	1 (0.15)	1 (0.17)	0 (0.00)	1 (0.10)	0 (0.00)	0 (0.00)	0 (0.00)	4
	Sum	8	3	4	7	6	2	10	12	8	2	62
	E_j	0.64	0.46	0.40	0.30	0.33	(ϵ)	0.23	0.41	0.47	(ϵ)	
	d_j	0.36	0.54	0.60	0.70	0.67	0.99	0.77	0.59	0.53	0.99	
	w_j	0.05	0.07	0.08	0.10	0.09	0.14	0.11	0.08	0.07	0.14	

Note. Normalized Data is in Parentheses, E_j : degree of Entropy, d_j : degree of diversification, w_j : degree of Weight, ϵ : 0.000001, & Numbers Represent EE Components.

most consideration for EE ($p_{ij}= 36$) was in the third chapter of this book and the highest weight ($w_j= 0.16$) was related to noise pollutants and environmental protection in the Constitution. It can be concluded that

the most neglect towards EE was in these components. EE was not a priority in 12th grade SST and a proportion of curriculum content should be included in these books (see Table 4).

Table 4
Decision matrix of EE in SST of 12th grade

Components		1	2	3	4	5	6	7	8	9	10	p_{ij}
Resource												
12 th grade (n= 3324)	Chapter One	1 (0.20)	2 (0.50)	0 (0.00)	0 (0.00)	0 (0.00)	1 (ϵ)	0 (0.00)	1 (0.14)	1 (0.33)	1 (ϵ)	7
	Chapter Two	1 (0.20)	1 (0.25)	0 (0.00)	1 (0.33)	1 (0.14)	0 (0.00)	1 (0.11)	1 (0.14)	0 (0.00)	0 (0.00)	6
	Chapter Three	3 (0.60)	1 (0.25)	5 (0.83)	3 (0.64)	7 (0.86)	1 (ϵ)	8 (0.89)	5 (0.72)	2 (0.64)	1 (ϵ)	36
	Chapter Four	0 (0.00)	0 (0.00)	1 (0.17)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	1
	Sum	5	4	6	4	8	2	9	7	3	2	50
	E_j	0.68	0.75	0.33	0.47	0.29	(ϵ)	0.25	0.57	0.47	(ϵ)	
	d_j	0.32	0.25	0.67	0.53	0.71	0.99	0.75	0.43	0.53	0.99	
	w_j	0.05	0.04	0.10	0.08	0.11	0.16	0.12	0.06	0.08	0.16	

Note: Normalized Data is in Parentheses, E_j : degree of Entropy, d_j : degree of diversification, w_j : degree of Weight, ϵ : 0.000001, & Numbers Represent EE Components.

The Fourth Question

Of the sum total of 9070 units identified for SST, only 144 units were allocated to EE, indicating that EE in all SST was not adequately considered. EE in the 10th grade SST was ($p_{ij}= 32$), EE in the 11th grade SST was ($p_{ij}= 62$), and EE in the 12th grade SST was ($p_{ij}= 50$). Therefore, the most considerable EE was for the 11th grade

SST and the highest weight ($w_j= 0.37$) was related to noise pollutants and environmental protection in the Constitution. It can be concluded that the most neglect towards EE was in these components. EE was not a priority in SST and a proportion of curriculum content should be included in these textbooks (see Table 5).

Table 5
Decision matrix of EE components in Senior High School SST

Components		1	2	3	4	5	6	7	8	9	10	p_{ij}
Resource												
Sum (n=9070)	10 th grade	5 (0.28)	3 (0.30)	2 (0.16)	4 (0.26)	2 (0.12)	2 (ϵ)	2 (0.10)	3 (0.14)	3 (0.21)	2 (ϵ)	32
	11 th grade	8 (0.44)	3 (0.30)	4 (0.34)	7 (0.48)	6 (0.38)	2 (ϵ)	10 (0.48)	12 (0.54)	8 (0.58)	2 (ϵ)	62
	12 th grade	5 (0.28)	4 (0.40)	6 (0.50)	4 (0.26)	8 (0.50)	2 (ϵ)	9 (0.42)	7 (0.32)	3 (0.21)	2 (ϵ)	50
	Sum	18	10	12	15	16	6	21	22	14	6	144
	E_j	0.97	0.99	0.91	0.95	0.88	(ϵ)	0.86	0.89	0.88	(ϵ)	
	d_j	0.03	0.01	0.09	0.05	0.12	0.99	0.14	0.11	0.12	0.99	
	w_j	0.01	0.003	0.03	0.02	0.04	0.37	0.05	0.04	0.05	0.37	

Note. Normalized Data is in Parentheses, E_j : degree of Entropy, d_j : degree of diversification, w_j : degree of Weight, ϵ : 0.000001, & Numbers Represent EE Components.

CONCLUSION

The purpose of this study was to identify the role of EE in senior high school SST in Iran. The results show that there is no balanced and comprehensive attention to EE in 10th, 11th, and 12th grade SST. The main findings indicate that in the SST of 10th grade, environmental protection component has the most frequency, while the water pollutants, air pollutants, sound pollutants, industrial pollutants, and environmental protection in the constitution components have the

least frequency; in the SST of 11th grade, environmental pollution and its relation to human life have the most frequency, while sound pollutants and environmental protection in the constitution have the least frequency; in the SST of 12th grade, air pollutants have the most frequency, while sound pollutants and environmental protection in the constitution have the least frequency. By comparing senior high school SST, it is concluded that attention to the environmental education components has been low in SST.

It is recommended that in the short term, in-service training and workshops provide to teachers and in the long term, SST becomes reviewed and revised to include appropriate EE content. Based on the findings, two components of noise pollutants and environmental protection are neglected in the Constitution. For noise pollutants, it can be argued that this phenomenon has not yet reached a crisis level or emerged as a social concern among people and the government. For not paying enough attention to environmental protection in the Constitution, it should be mentioned that the Constitution of the Islamic Republic of Iran (Article 50) explicitly emphasizes environmental protection. Furthermore, in recent years, the Iranian government has invested heavily in coping with drought, restoring Urmia Lake, and confronting the dust particles in the southern regions. In relation to EE, however, more laws are needed in order to protect Iran's national environment. In conclusion, it is suggested that in order to socialize and educate students on respecting the environment, environmental issues and challenges should be included in the content of school textbooks. Therefore, students would be familiar with the knowledge, attitudes, and skills needed for environmental protection.

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Case Study

**The Impact of Physical Health on Social Health.
Case Study of Two Healthy and (Cardiovascular) Patient
Groups in Rasht City of Iran**

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ABSTRACT

The present article investigates the impact of physical health on social health. The purpose of the study was to show how physical health as a biological matter affected the feeling of social health and whether physical disease was an obstacle to the sense of social health. The presumption was that social health was a structural matter that exceeded physical and bodily health in importance and its fulfillment was not dependent on the latter. The authors used Keyes theory of social health to examine the hypothesis. The sample comprised two convenience groups, one healthy and the other ill. The findings of the study showed that the social health of the sample was moderately low. The results on five social health components demonstrated that social actualisation and social acceptance were moderately high, while the descriptive statistics of other three (social coherence, social integration, social contribution) indicated that the three were low in the sample. The comparison of five indicators between the two groups demonstrated that healthy individuals maintained better a “feeling of actualisation and social acceptance” while the ill enjoyed higher degrees of “social coherence, social integration, and social contribution”.

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INTRODUCTION

A review of the history of medicine indicates that there have been various perceptions of health throughout time. Based on historical accounts, health and related concepts have evolved to become more complex and multidimensional. Based on a primary understanding, wellbeing is guaranteed by the adoption of certain policies for dealing with natural incidents that may be inflicted on individuals but are out of the affected individual's control and may endanger the health of more than one in case if it is not subdued (Vedadhir & Sadati, 2008). In late 19th and early 20th centuries, medical breakthroughs and discoveries added the idea of prevention to the prevalent understanding of hygiene of the time and elevated it into retrofitting and medication combined. Nowadays, health is constitutive of something more than biomedicine and includes medication and medical interventions as multidimensional multi-layered processes for the preservation of health. Based on a definition by the World Health Organization (WHO), health does not simply imply safety from disease or injury; rather, health means complete fulfilment of physical, psychosomatic, spiritual, and social wellbeing (Vedadhir & Sadati, 2008). The understanding of health as constitutive of something more than a physical organism was recognised earlier during the Alma-Ata (1978) meeting. The new perception of health brought a paradigmatic shift in the knowledge of health and medicine; during the session, health was determined as a fundamental human right and the maxim

“health for all by 2000” was introduced to the world (Vedadhir & Sadati, 2008). The realisation of the purpose, however, relies on recognising social, political, cultural, and economic aspects of health. Henceforth, determining health care and hygiene strategies have tried to consider socio-economic roots of wellbeing. In health improvement strategies, too, the identification of communal and individual empowerment tools has been considered the main route for goal achievement.

In effect, health is no longer a taken-for-granted medical phenomenon; rather, it constitutes social, cultural, and economic dimensions and causes. “Social medicine” has caused a novel approach to health, where the duty of the physician, who must facilitate preventative therapies, becomes entangled in social networking, public sympathising, construction of public trust and cooperation. Evidently, this concentration in new medicine is disconnected from the ill to the healthy. The development of screening for unwanted symptoms prior to diagnosis, and attempts by healthcare systems to promote healthier lives, are part of the transition. In this approach, physical, psychosomatic, and social health are complementary aspects of health in general, while causes affecting it vary by society. Therefore, defining any health improvement program without the consideration of socio-cultural and economic backdrops would give unfeasible results.

The problem of the present study concerns whether health is a social construct, whether biological obstacles in form of

diseases in individual level could lead to the sense of lack of social health in the grand, social level. The main question of this study is, “what elements contribute to social health?”. Previous studies have underscored the role of socio-economic causes in improving physical and social health (Blaxter, 1990; Kaplan & Keil, 1993; Shavers, 2007). This study examines whether social health is influenced by biologic conditions, too. The question is whether physical health is of any influence on social health; in other words, if people divested of bodily health are devoid of social health as well. The purpose is to evaluate the degree of divergence and convergence between two aspects of health, namely physical and social. The presumption is that the social aspect is not seriously associated with physical health. Social health is a constructional phenomenon that arises from the functionality of social, economic, and cultural structures, and is less influenced by physical health and biological issues. As a result, if a society maintains a socio-cultural functionality, it could promise acceptable states of social health, regardless of the physical condition of its individual members. In these circumstances, the absence of bodily health is not a detriment to social health.

Theoretical Framework

Human attention to disease as a pathological phenomenon has been a permanent subject of studies. The attraction has changed along with human mentality about the surrounding

world and his own body. The transition in body pathology could be observed in societies’ reaction to diseases from the ancient times to the modern era. Two general approaches toward disease and health could be distinguished between two historical time sets. From Ancient Greece to modern times, it is distinguished by three medicinal views of Ancient Greece (humoral), traditional Chinese medicine (acupuncture), and traditional Indian medicine (ayurvedic) (Masoudnia, 2010). Here, disease is assumed as the result of metaphysical powers and the wrath of supernatural forces, or the bodily imbalance enforced by an external source in nature (Morgan et al., 1985). Generally, the dominant pattern of diagnosis in this era rests on natural and supernatural forces. The second phase begins with modernisation and the advent of biomedicine. Based on this paradigm, every disease has causes that need to be diagnosed and cured. Biomedicine is featured by Masoudnia (2010):

1. Lineal causality: human individual gets diseases with no volition or agency;
2. Disease is a physiologic process upon which medication should be performed instead of psychic and anxiety processes;
3. The dichotomous approach says that an individual’s psychological condition and anxieties are separate from his physical condition (Lovallo, 1997).
4. Health is the absence of biological infirmities;
5. Diseases have recognised causes;
6. The body is like a machine that restores health through special therapies that act by halting diseases or deterring them.

Due to the functional propensities in improving health conditions, biomedicine has been the long-time predominant mode in medication sciences. Meanwhile, the approach was criticised in the late modernity by socio-medicine views. The original approaches defend some principles:

1. Health is more a source for daily livelihood than a mere absence of diseases;
2. Diseases are caused by a set of factors, which are mainly environmental;
3. The locus of diagnosis is the relation of body and environment;
4. The improvement in general health is probably the result of changes in people's ways of life and their living circumstances (Taylor & Field, 2007).

With this approach, disease is a social construct that cannot be until someone diagnoses and describes it. Unlike biomedicine, the belief is that epidemic diseases diagnoses are normally different across time and geography (Jones & Moon, 1992).

Social sciences adopt the approach that considers the body and its complications knitted into social, cultural, economic, and political contexts. New social sciences follow the legacy of late 19th century sociologists, like George Simmel, Emile Durkheim, Marcel Mauss, and Robert Hertz, in considering the body more as the product of socio-cultural complexes that blend with human biology and genesis to construct humans in their social and individual senses. The dichotomous health/disease is understood biologically as the "normal" or "healthy" condition, defined

by a standard positivist state of "bodily balance", the absence of which will produce "harm". Accordingly, disease is beyond an undeniable biological condition, a cultural construct that is formed differently in various cultural and strategic settings. For a person to assume himself healthy or ill, or for a community to consider a member as such, a series of socio-cultural preconditions are required. Although biologically determined and bodily actuated (skin changes in hue or sensory, lingual, and operational competences decline), bodily symptoms need to be measured in a conceptual continuum that defines the intensity of the case. To every condition in this continuum, society gives specified reactions which, in a cyclic manner, are transmitted to the diseased individual, who takes a position towards his condition accordingly. For example, Kasper and Ferguson's research shows that the definition of breast cancer is influenced by people's definition of the disease (Kasper & Ferguson, 2000).

Emphasis on various aspects of health and disease has created a health discourse in recent decades that has multiple inter-related aspects. Based on the definition of the World Health Organization [WHO] (1994), health is not merely the absence of disease, but includes the immunity from mental, social, economic, and physical infirmities (Bowling, 1991; Engel, 1997; Miringoff et al., 1999; Stewart & Ware, 1992; Ware, 1986; Wolinsky & Zusman, 1980). Here, spiritual wellbeing is highlighted next to other forms of health. According to the subject in this study, social health is elaborated upon and

the theoretical framework for understanding social health is explained.

Belloc and Breslow investigated the concept of social health for the first time in 1972; they defined social health as the “level of performance by individual members” and constructed a social index for health (Belloc & Breslow, 1972). They attempted to get to individual performance by proposing multiple questions considering physical, mental, and social health. The concept was later elaborated by Donald, who postulated that health is something more than diagnosing symptoms or reporting on an individual’s performance (Pourafkari, 2012). In their reasoning, individual wellbeing is neither mental nor physical. Rather, they postulate that social health is the meantime principle in determining health and a subordinate of it.

Social health has been studied in two hedonistic and functional perspectives (Ryff & Singer, 1998). In a hedonistic view, social health is measured by the degree of life satisfaction and the balance in positive and negative life experiences individuals. The functional view, on the other hand, measures social health based on individual dignity, meaningfulness of life, and man’s competence in fulfilling duties (Waterman, 1993). The latter measures social health for a lengthier duration of time. Various studies on social health include studies on emotional health in a hedonistic conceptual framework and evaluate positive functionality as an indicator of one’s social and mental wellbeing (Ryff & Keyes, 1995). Ryff and Keyes believed that health is something

more than the sense of satisfaction in life that is maintained by hedonistic views. Nowadays, social health is known as a blend of cognitive, mental, and social constructs that is the product of biologic factors; therefore, contemporary views take a more general spectacle in their evaluation of health, disease, and pathology. This has led to the formation of a wide range of interconnected terms: quality of life (Phillips, 2006), mental and psychosomatic health (Ryff & Keyes, 1995), and social health (Keyes, 1998).

For a long time, social health has been defined as the absence of negative social feelings like alienation or anarchy, without centralising psychological wellness in social health (Keyes, 1998). Besides due attention to individual social health, the idea of equal attention to the social nature of health has also been promoted. In Keyes’s belief, social health or its absence has been the long-time concern of classical sociology. Despite central concepts like anarchy and alienation elaborated by Marx and Durkheim, classical sociologists have appreciated the multidimensional nature of positive social health. One of the *de jure* benefits of social life is social integration that adds the sense of internal cohesion, conscience, and communal destiny to life (Durkheim, 1952).

Keyes defines social health as individual’s perception of his social functioning and well he acts in relationships with peers and groups. Social health in this sense implies individual’s social consciousness as a meaningful, perceptible whole that has

the potential to flourish, along with a sense of social belonging and shared communal destiny. Accordingly, he presents his five-fold model in which social integration, social acceptance, social actualisation, social contribution, and social coherence are components of social health. They are defined as:

- Social integration measures the quality of the relationships an individual makes with his community; it is a quantity with which the individual identifies his shared communal traits;

- Social acceptance is the interpretation of society according to the generalised behaviour of its individual members; it is like individual acceptance, as those who equate it with trust believe that people are kind, active, and capable of making efforts;

- Social actualisation means the evaluation of society's competence and paths; it is close to the concept of autonomy and implies that society is in control of its own destiny;

- Social contribution is the measurement of social value by individual and holds that an individual is a constitutive part of social life; it is like functionality and responsibility in meaning;

- Social coherence means the individual's cognition of the quality, organisation, and mechanisms of social world; it constitutes the enthusiasm for knowledge of the world, as healthy individuals not only are mindful of the world they live in, they also try to grasp what goes on around them.

METHOD

The method used in this study was a survey of field data. The technique for data gathering was a standard questionnaire. After preparing the initial questionnaire, primary testing, and finalisation, data were gathered. Data were gathered by referring to two groups of people who had cardiovascular disease and those who did not. Rasht, a city in northern Iran with a population of 400,000, was the society question, focusing on the 20-40-year olds. Based on the sampling method, 326 samples were selected, of which 300 questionnaires were gathered. The sampling was non-probability convenience and quota sampling. Non-probability sampling is used when a group of individuals has a higher but unspecified chance for being selected and is used because of the absence of frame and population dispersion in society. This study examined two groups: healthy and patient people. The patients mainly visited the Rash Heshmat hospital for heart diseases. The whole sample consisted of 300 individuals, with 150 healthy and 150 ill individuals, based on the quota technique.

The healthy people were mainly members of individual's relatives. The heart patients were chosen for some reasons; first, due to the increasing rate of this disease in Iran in the past two decades, more as a result of life quality, social pressures, and structural causes, than biological contributors. Second, heart diseases are considered among the fatal diseases that if cured and controlled through changing

lifestyles, patients have the chance to return to the ordinary life. For the above reasons, patients with heart diseases are good cases the study of whom allows for the assessment of the relationship between physical and social health.

FINDINGS

The demographic backgrounds of the respondents are as follows:

- Sex: male respondents outnumber female respondents (57% to 43%);
- Physical health condition: half (50%) of respondents are healthy and half (50%) are patients;

- Age: 41% of respondents are between 45 to 55 years old, 31% below 45, and 28% above 55; the average age of respondents is 50.76, with a standard deviation of 8.58;

- Education: the lowest education level among respondents is diploma (56%), followed by bachelor’s degree (25%), associate degree (10%), and master’s and higher (9%);

- Income: the income level of more than one third of respondents is less than 5,000,000 IR;

- Residence: most respondents (47%) resided in downtown Rasht (Table 1)

Table 1

Relative distribution of respondents based on background variables

Variable	f	%	M	SD	Variable	f	%	M	SD		
Sex	Female	129	43	-	-	Physical health	Healthy	150	50	-	-
	Male	171	57				Patient	150	50		
Total	300	100			Total	300	100				
Age	Below 45	92	7/30	76/50	58/8	Education	Diploma	167	7/55	-	-
	45-55	124	3/41				Associate	31	3/10		
	Above 55	84	28				BA	74	7/24		
					MA & higher		28	3/9			
Total	300	100			Total	300	100				
Income	5-3 Million IR	118	3/39	-	-	Residence	outskirts of town	69	23	-	-
	5.1-7 Million IR	52	3/17				South of city	55	3/18		
	7.1-9 Million IR	25	3/8				Downtown	142	3/47		
	9 Million IR & above	105	35				North of city	34	3/11		
	Total	300	100			Total	300	100			

Social Health Index and Its Components

Social health in the present survey was measured by five indicators with 20 items. To build the concept of social health and its components, total scores of questions measuring each concept were aggregated with their negative and positive scores. Based on the information in Table 2, the range of changes in social health (20-100) and the mean (58.97), it is inferred that the rate of social health in the sample is moderately low. The analysis of five components of social health verified that social actualisation and social acceptance were moderately high in the sample, while the other three components (social coherence, social integration, and social contribution) were low among the sample and need to be strengthened; in all three, the given mean was lower than the hypothesised level. The low rate of social health in both groups indicates that the social health factor is influenced by structural conditions and social situations; similar social conditions for both groups causes both to have low sense of social health.

Analytical Findings

The Relationship Between Income, Education, and Social Health. To analyse the relationship between respondents' income and education level with social health, this study used the Spearman correlation coefficient. The results of the correlation coefficient on the mentioned variables and their relationship is given separately for two healthy and ill patient groups, answering the questions "Is there any relationship between income and the perception of social health for each healthy and ill group?" and "Is there any relationship between education and the sense of social health for each healthy and ill group?"

Based on the information in Table 3, the relationship between income and the sense of social wellbeing is only visible in the healthy group. Considering the correlation coefficient ($r = -0.184$), it could be said that there is a weak, negative relationship between the two variables. Among the healthy respondents, with the increase in income level (presuming the steadiness of other variables), the approximate level of social health declines gently; in other

Table 2

Relative distribution of respondents based on social health and its components

Component	Mean	Standard Deviation	Minimum	Maximum
Social Actualisation	73/12	51/2	4	20
Social Coherence	14/8	22/2	3	15
Social Integration	41/7	25/2	3	15
Social Acceptance	19/16	66/2	5	25
Social Contribution	50/14	72/3	5	25
Social Health	97/58	07/6	20	100

Table 3

The relationship bet. income & education and social health based on group

Physical health	Independent variable	Dependent variable	Correlation coefficient	Significance
Healthy	Income	Social health	184/0-	024/0
Diseased			024/0	768/0
Healthy	Education		025/0-	758/0
Diseased			024/0-	766/0

words, the two variables change in opposite directions. In effect, it is discerned that social health is influenced by social structures; with an increase in income, individuals' amount and type of demands change from natural and biological to social, and social actualisation takes incidence. Under these circumstances, if social backdrops for answering the demands are not provided, the sense of social health will decline. The other relationships between variables are not meaningful.

Social Health and Its Components in Each Group. For evaluating the relationship between physical health and social health and its components, an independent t-test is used:

1- "Is there any relationship between physical health and sense of social actualisation?"

2-"Is there any relationship between physical health and sense of social coherence?"

3-"Is there any relationship between physical health and sense of social integration?"

4-"Is there any relationship between physical health and sense of social acceptance?"

5-"Is there any relationship between physical health and sense of social contribution?"

6- "Is there any relationship between physical health and sense of social health?"

The findings of independent t-test regarding the comparison of social health and its components in two healthy and ill groups show that there is a significant difference, with an error rate of less than 1% and confidence level of 99%. The mean comparison suggests that social health of the ill (mean: 60.94) is higher than the rate among the healthy (mean: 57.01) (Table 4). Moreover, the results comparing five components of social health between the two groups tells that healthy respondents are of higher "social actualisation and social acceptance", while the ill maintain a higher sense of "social coherence, social integration, and social contribution". The higher levels of social actualisation and social acceptance among the healthy come from the socio-cultural construction of the two conditions of health and disease. Having a positive image of one's body based on social definition of health helps the healthy individuals actualise and achieve better social acceptance.

Table 4

The relationship between physical health and social health and its components

Variable	Physical health	Descriptive statistics		Analytical statistics		
		Mean	Standard deviation	T	df	Sig
Social Actualisation	Healthy	76/13	06/2	826/8	298	001/0
	Diseased	69/11	50/2			
Social Coherence	Healthy	29/7	86/1	129/7-	298	001/0
	Diseased	98/8	23/2			
Social Integration	Healthy	24/6	88/1	447/10-	298	001/0
	Diseased	57/8	97/1			
Social Acceptance	Healthy	84/16	83/2	357/4	298	001/0
	Diseased	54/15	30/2			
Social Contribution	Healthy	86/12	69/3	485/8-	298	001/0
	Diseased	14/16	95/2			
Social Health	Healthy	01/57	00/6	908/5-	298	001/0
	Diseased	94/60	49/5			

DISCUSSION

The present article attempted to study the relationship between the biologic condition of health/disease and social health as a socio-cultural construct. Based on the findings of the study, social health is more the result of social constructs than actual physical competence/incompetence. In other words, social health is acceptable in societies where the prerequisites for individual growth and improvement is prepared regardless of bodily conditions, and individuals have access to equitable resources and opportunities as members of a community. A society's health indices could include rule of law, acceptable distribution of wealth, public access to decision-making procedures, and the level of social capital. Based on the findings in this study, the

level of social health among the sample is moderately low. The findings related to the five components of social health show that the level of social actualisation and social acceptance are moderately high while the descriptive statistics of the remaining three (social coherence, social integration, social contribution) indicate that all three are weak among the sample and in need of strengthening; in these three indicatives of social health, mean is lower than the predicted rate. To improve social health, the orientations in policy-making should shift toward structural changes and reforms, because social backdrops are facilitators of social health.

The present research has come to the following theoretical findings and proposes questions based on Keyes' theory. In his

study on social health, Keyes offers a set of pre-arranged, standard questions, the assessment of which in the individual level makes the assessment of social health probable. This is while the findings of this study show that health in various forms is a social construct. That is why a patient individual (physically) might have the highest levels of social health in form of factors such as social coherence, social integration, and social contribution, while, on the other hand, a healthy individual (physically) might demonstrate the lowest rate of social health based on the same factors. Keyes' point of departure is the ideal, healthy society and the level of individual harmony with it. In other words, Keyes presupposes social conditions as ideal and thereupon, the level of both healthy and patient groups regards with integration, coherence, and contribution is judged. Consequential to such a presumption, the role of social structures, the quality of life, and individuals' agency is constructing health and disease is undermined.

CONCLUSION

In this article, we attempted to examine the impact of physical health on social health. The purpose of the study was to show how physical health as a biological matter affects the feeling of social health and whether physical disease was an obstacle to the sense of social health. The presumption was that social health is a structural matter that exceeds physical and bodily health in importance and its fulfillment is not dependent on the latter. The problem of

the present study concerns whether health was a social construct, whether biological obstacles in form of diseases in individual level could lead to the sense of lack of social health in the grand, social level. The method used in this study was a survey. The technique for data gathering was a standard questionnaire. Based on the sampling method, 326 samples were selected. The sampling was non-probability convenience and quota sampling.

The authors used Keyes theory of social health to examine the hypothesis. The sample was comprised of two convenience groups, one healthy and the other ill. The findings of the study showed that the social health of the sample was moderately low. The results on five social health components demonstrate that social actualisation and social acceptance were moderately high, while the descriptive statistics of other three (social coherence, social integration, social contribution) indicated that the three were low in the sample. The comparison of five indicators between the two groups demonstrated that healthy individuals maintain better a "feeling of actualisation and social acceptance" while the Patients had a higher degree of "social coherence, social integration, and social contribution". As a result, if a society maintains a socio-cultural functionality, it could promise acceptable states of social health, regardless of the physical condition of its individual members. In these circumstances, the absence of bodily health is not a detriment to social health.

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Empowerment of Women through Pre-farming Careers in Rural Japan

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ABSTRACT

This paper investigates how women's pre-farming careers affect the development of their individual activities and their empowerment. Japanese rural women used to work in agriculture under patriarchy and therefore did not have any decision-making authority. Nowadays, rural women have a variety of non-agricultural knowledge, which they acquired well before entering agriculture. It is assumed that their pre-farming careers boosted women's empowerment such as startup women's activity with own free will. To verify this assumption, we conducted semi-structured interviews with seven rural women entrepreneurs who had non-agricultural experiences before entering agriculture. From our results, we conclude that women's pre-farming careers have the following two positive effects: (1) Rural women acquire decision-making right by using their savings from their pre-farming careers for the initial investment of their individual activities; (2) Any kinds of the women's pre-farming careers – even if they are non-agricultural experiences and skills – are easy to be used in public relation, negotiation, and selling of their individual activities.

Keywords: Individual activity, Japan, pre-farming career, rural women entrepreneurial activity, women's empowerment, web-based group

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INTRODUCTION

Background

Gender equality is of great importance in the world. In Japan, women in rural areas play an essential role. Fifty years ago, rural women were considered a labor force who helped with family farming, but their

viewpoints were not accepted, especially in family agriculture. However, rural women succeeded in improving their position in family farm management through women's entrepreneurial activities (Tsutsumi, 2010). These activities not only include assisting in primary agricultural production, but also value-adding through food processing, establishing restaurants, and food education. Women, through these activities, utilize their housework experiences. Women have advanced into society thanks to housework simplified by the home appliance revolution over the past 50 years (Tsutsumi, 2000). The number of women accounts for approximately 50% of the total farming population (Ministry of Agriculture Forestry and Fisheries [MAFF], 2018), and the importance of women's workforces has been recognized and considered as being equivalent to that of men (Hara-Fukuyo & Ouchi, 2012).

The MAFF started to support rural women's activity to pursue their economic independence and empowerment. In order to strengthen the support, MAFF named it "Rural Women's Entrepreneurial Activity (RWEA)" to make clear their position in the agricultural system and to offer more support to their activities (Joseini Kansuru Bijon Kenkyukai [Society for the Study of Women's Vision], 1992). MAFF's target was mainly women's traditional groups such as the women's unit from the already established agricultural cooperative association. Under MAFF's support, the traditional group performs the same

activities in cooperation with the group's members. The number of RWEAs recently reached approximately 10,000 (MAFF, 2017). These activities helped to solve social problems, particularly women's economic independence, and to promote women's empowerment. Nowadays, it has become the hub for social enterprise in regional activation (Sawano, 2012).

Rural women improve their empowerment through RWEAs; however, they still are not equal to men in terms of obtaining decision-making rights in agricultural management and borrowing from banks due to low retention of fixed assets (Egami, 1997). For this reason, it is considered difficult for rural women to start-up entrepreneurial activity by the individual. Although, recently the number of individual activities has increased since 2000 which is also supported by MAFF (Figure 1). We hypothesized that their savings, which are obtained from their pre-farming careers, encourage them to start-up their individual activity. Figure 2 illustrates that most rural women in recent years had pre-farming careers, with more than 65% of rural women aged between 30-50 years moving into farming after having worked outside of agriculture. For that reason, rural women have savings and diverse skills resulting from differing pre-farming careers.

Therefore, in this study, we focus on how to use rural women's pre-farming careers in their RWEA each step and the effect of women's empowerment.

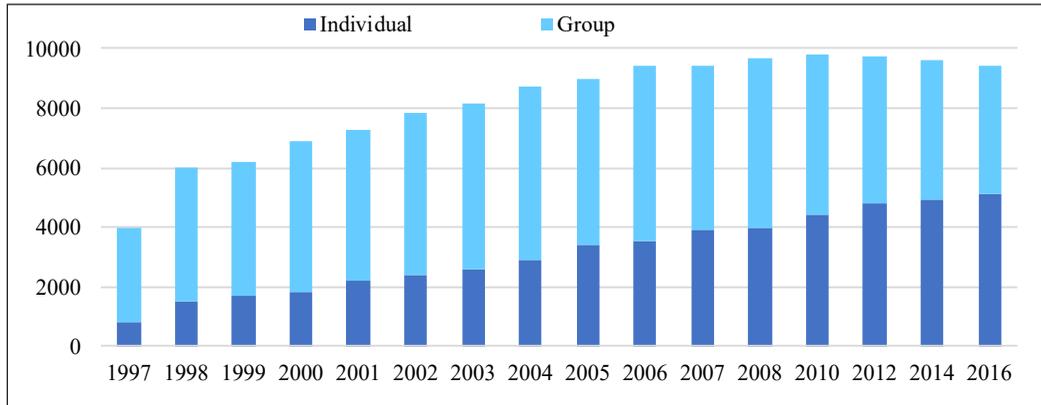


Figure 1. Number of rural women entrepreneurial activities in Japan
Source: MAFF (2017)

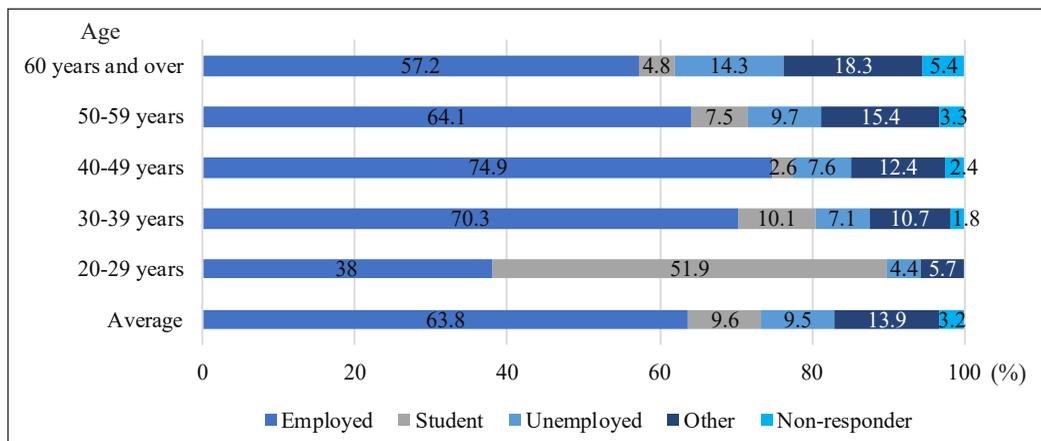


Figure 2. Pre-farming careers of rural women
Source: MAFF (2013)

Related Work

This section relates preceding studies with our study from the viewpoint of the utilization of former careers.

Effect of Women’s Former Careers in Non-Agricultural Businesses. Boeker and Fleming (2010) mentioned that past work experiences in the same industrial area gave a positive effect on the credibility and expertise of entrepreneurs. However, they

did not take women’s work position into account.

Taniguchi (2002) showed women’s former careers promoted entry to self-employment by examining the process of transition into self-employment. Xavier et al. (2012) also showed that women entrepreneurs used their previous job experiences in their small or medium businesses. The target of these studies is entrepreneurial women who made a

change from salaried employment to self-employment. They have not focused on agricultural businesses, which is in a different situation from ordinal businesses (Kagawa & Oda, 2008). We explore the effect of women's former careers in the agricultural individual business.

Effect of Women's Pre-Farming Careers in Agriculture. In the research on the effect of rural women's pre-farming careers in agricultural management, Katakura (2007) mentioned that their pre-farming careers effectively improved family farming. He also pointed out that the pre-farming careers were used especially in marketing and financial management. Hara-Fukuyo (2009) claimed that rural women starting individual activities were more accessible than before due to their various skills.

From these studies, it is presumed that women's pre-farming careers have a positive effect on the development of rural women entrepreneurial activity. However, they do not mention what kind of job experiences could be used at which step of women's entrepreneurial businesses. From these preceding researches, in this study, we discover how the pre-farming careers of rural women are helping improve individual activities and whether it is connected to promoting women's empowerment.

METHOD

To clarify how women's pre-farming careers affect individual activities, and whether it promotes rural women's women empowerment, we focused on the following

two points: First, the effect of women's pre-farming careers on improving their individual activities, and second, the outcome of Saitama career-up program and the current required support. To further understand these points, we selected a method of semi-structured interviews which could produce rich and detailed data sets offering an accurate assessment of the characteristics of individuals and phenomena (Drever, 1995; Fallon, 2008). Therefore, we conducted the semi-structured interviews in Saitama prefecture with seven interviewees. Table 1 summarizes interviewees' age, the situation of entry to farming, marital status, major crops, acreage, and contents of activity. The interviewees participated in the "Saitama Career-up program for agricultural women," the details of which will be given later in this paper. The survey period was from September to November 2017 for 1.5 to 2 hours per person. The contents of the interviews were composed of the following 12 points: (1) Academic and career background, (2) Encounter with agriculture, (3) Who decided to start, (4) Concrete activity, (5) Technical acquisition, (6) Initial investment, (7) Operating fund, (8) Number of women entrepreneurial activity employees, (9) Sales amount, (10) Participation background of the support program, (11) Acquired support, and (12) Facing problems.

For the survey Saitama prefecture was selected, which is located near Tokyo. There is a connection with Tokyo by public transportation. The prefecture started support for the RWEAs by launching the

Table 1
Profiles of interviewees

Name	Age (Actas)	Entry to Farming	Marital Status	Major Crops	Crop Acreage	Activities
A	50s	New Entry	Common Law	Green Onion	20a	Pickles Production, Negotiation, Selling, Public Relations
B	50s	Subsequent of Parents	Married	Tomato	30a	Negotiation, Selling, Public Relations
C	40s	Through Marriage	Married	Rice, Pear	16ha	Baked Sweets Production, Negotiation, Selling, Public Relations
D	40s	Through Marriage	Married	Cyclamen	5,000Pots	Negotiation, Selling, Public Relations
E	40s	Inheritance	Single	Seasonal Vegetables	Unclear	Jam Production, Negotiation, Selling, Public Relations
F	50s	Through Marriage	Married	Rice, Vegetables	Unclear	Seasoning Production, Negotiation, Selling, Public Relations
G	40s	New Entry	Married	Rice	28ha	Sake Production, Negotiation, Selling, Public Relations

Career-up program for agricultural women (Saitama Career-up program) in 2016. This program targets motivated agricultural women who can be the next-generation leaders. This program comprises ten rounds of five lectures, four study tours with well-established rural women entrepreneurs, and a final session where participants present their activity plans created in the program.

Table 2 indicates the lecture schedule that the majority of the lectures are devoted to learning product development, marketing methodology, and case studies of the well-established rural women's entrepreneurial activities. Study tours were conducted with successful women entrepreneurs on their concrete activities along with a question-and-answer session with the

Table 2
Lecture schedule of Career-up Program

No.	Contents
1st	How to set up a management strategy Creating a business plan Product development and marketing method
2nd	Public Relations methodology Utilization method of SNS How to approach the 6-sector industrialization
3rd	Learning design and information dissemination skills Basic PowerPoint skills
4th	Basic knowledge of food processing Creating a business plan exercise – 1
5th	Creating a business plan exercise – 2 Business plan feedback

Source: Saitama Prefecture (2017)

participants. After the ten lecture rounds, the participants presented their plans, while the prefecture invited some companies of the same prefecture to facilitate collaboration with them.

RESULTS

We summarized the results in the following two points:

Effect of Pre-Farming Careers on Individual Activity

Table 3 covers the academic backgrounds and pre-farming careers of the interviewees. It shows that three interviewees graduated from university, three from junior college, and one from agricultural high school. All interviewees have had pre-farming careers.

We summarized each interviewee’s answer related to their pre-farming careers and entrepreneurial activities.

Person A was formerly a negotiator in pub and antenna shop management. She said that she had already grasped the flow of negotiation and the target topics of the conversation, so the negotiations in the

entrepreneurial activity advanced smoothly. Additionally, she said that the knowledge of food safety and hygiene she obtained through pub management was also useful in the aspects of the entrepreneurial activity related to food processing.

Person B acquired basic PC skills from her work experience as a clerk at the leasing company. She said that she used these skills in the process of mass-producing labels for commodities for public relations.

Person C acquired agricultural knowledge from her university education. She said that knowledge was useful when selling her products, specifically when describing the differences and features of various breeds to her customers. In addition, she had previous work experience as a local government officer and utilized the knowledge obtained there in the acquisition of business funding and the application for subsidies from the local government.

Person D said that the basic knowledge related to PCs she obtained from her experience as a bank officer was useful in creating promotional materials.

Table 3
Pre-farming careers of interviewees

Name	Academic Background	Pre-farming Career
A	University Graduate (Literature)	Pub Management and Service, Antenna Shop Management, Publishing Free Papers
B	Junior College Graduate (Childhood Education)	Office Work
C	University Graduate (Agriculture)	Local Government Officer
D	Junior College Graduate (Law)	Bank Officer
E	University Graduate (Engineering)	Mechanic Design
F	Agricultural High School Graduate (Food Science)	Food Company, Short-time Job in Foreign Country, Office Work
G	Junior College Graduate (Art)	Backpacking, Waitress

Person E said that the design techniques she learned at her university were similar to those used in product development; therefore, the experiences helped improve her performance of the activity. Moreover, the practical knowledge related to the product testing and product improvement was also useful for her activity because it had similarities with the trial production and improvement of food processing. She was formerly a mechanical designer at a major camera company, and the experience of designing using special software helped in her creation of promotional materials.

Person F said that the knowledge of food science was useful in the development of foods using vegetables from her home garden, food processing methods using fermentation, and descriptions of product characteristics for the customers. In addition, she acquired an active posture through a short-time job in a foreign country. She said that she was able to actively contact the relevant agencies when planning her

entrepreneurial activities because of her experience. Moreover, she obtained basic PC skills from her experience working in an office, which she was able to utilize in the accounting aspects of her role.

Person G said that the knowledge related to choosing colors that attracted customers was useful when she created promotional materials for her activity, for example, hand-written advertisements and pamphlets. She also had experience working as a waitress, which helped her to grasp customer needs during the sale. Moreover, she said that her experiences backpacking broadened her horizons and contributed to the development of her entrepreneurial activities. Additionally, her experiences also improved her communication skills, which enabled her to maintain a positive attitude in the face of adversity.

Based on these results, we created eight career experience classifications (Table 4); subsequently, we determined which of the skills learned in their pre-

Table 4
Pre-farming career classification

Pre-farming Career Classification	Utilization of Pre-farming Careers
Management	Negotiation experience is useful during discussions at the start-up time
Service	Customer observation ability helps to meet needs
Desk Work	Basic PC skills are helpful in accounting and in creating PR material
Art	Aesthetic sense is useful for PR material and store display
Food and Agriculture	Basic knowledge is useful for food processing and PR statements
Engineering	Manufacturing basics and advanced PC skills are used for product developments and PR material
Government Employee	Acquisition of business development seeds and creation of application materials can be done smoothly
Foreign Experience	Dynamic attitude and extensive view are useful for entrepreneurial development

farming careers were easy to apply in their entrepreneurial activities (Table 5). The entrepreneurial activities are divided into six categories: planning, product development, food processing, public relations (PR), negotiation, and selling.

For this visualization, we gathered that their pre-farming careers were utilized at various points in their entrepreneurial activities, even the knowledge gained is different from agriculture. Especially, pre-farming careers that are related to agriculture or production knowledge tend to be utilized in planning, product development and food processing relevant to agriculture. Meanwhile, non-agricultural careers tend to be utilized in the category of public relations, negotiation, and selling.

Table 5
Effect of women entrepreneurs' pre-farming careers

Activity Categories	Effective Pre-farming Career
Planning	Service
	Government Employee
	Foreign Experience
Product Development	Engineering
	Food and Agriculture
Processing	Engineering
	Food and Agriculture
Public Relations	Art
	Engineering
	Food and Agriculture
	Office Work
Negotiation	Management
Selling	Service
	Food and Agriculture

Table 6 summarizes the business aspect of the interviewees' activities based on their response, and highlights the following points:

Their activities, operated by one to five people, indicate that they are not large as compared to other Japanese entrepreneurial activities. Six of the seven people decided to start the activities of their own free will. Five of the seven people aimed to earn extra income for the family agricultural business, not for their economic independence. The activity's sales volume reveals two patterns in their utilization of operating funds: to support their entrepreneurial activity or to earn extra income for their family farm. The purpose of the women's entrepreneurial activities was economic independence, however, nowadays, the purpose is changing to earning extra income for their family agricultural business. The three interviewees utilized their savings for their activity's initial investment. The savings were made possible through the earnings from their pre-farming careers. From the above results, we can conclude that utilizing their savings for the initial investment led to an easier start for their activities and strengthened the rights related to decision-making that they exercised during the activities themselves.

Activity Development Through the Saitama Career-Up Program

In this subsection, the interviewees' answers are summarized on how the Saitama Career-up program — the details of which have been explained in section 2 — helped develop participant activities.

Table 6
Summary of respondents

Name	Entrepreneurial Activities	Number of Entrepreneurial Employees	Sales Amount	Who decided to start	Aim of the Activities	Initial Investment	Operating Fund
A	Processing Food, Selling, PR	1	Approximately One Million Yen	Herself	Extra Income for Own Farming	Personal Saving by Pre-farming Career	Entrepreneurial Activity Profits
B	Selling, PR	1	Unclear	Herself	Extra Income for Family Farming	Agricultural Management Income	As a Division of Agricultural Management
C	Farmers' Market, Processing Food, Selling, PR	3	Approximately One Million Yen	Herself	Extra Income for Family Farming	Personal Savings by Pre-farming Career	Personal Saving and Activity profits
D	Selling, PR	1	Unclear	Herself	Extra Income for Family Farming	Agricultural Management Income	As a Division of Agricultural Management
E	Processing Food, Selling, PR	1	Approximately 1.5 Million Yen	Herself	Farm Land Preservation	Personal Savings by Pre-farming Career	Personal Saving and Activity profits
F	Processing Food, Selling, PR	1	Unclear	Husband's Recommendation	Extra Income for Family Farming	Agricultural Management Income	As a Division of Agricultural Management
G	Food Education, Selling, PR	5	Unclear	Herself	Food Education	Unclear	Profit of Entrepreneurial Activity

Table 7 summarizes how the Saitama Career-up program, explained in Section 2, is used for women’s activities. From these results, we can work out the following points:

Women have a dual motive to participate in the program. The first includes problem-solving in the individual activity, and the second is that they were interested in the contents of the program such as personal consulting, study tour, and long-term programs. In particular, the local extension center has held several short-term programs on different contents. However, some rural women entrepreneurs are interested in attending long-term programs to get a chance of creating a new women’s entrepreneurial network.

From their answers, we gauged that interviewees learned the following points from the program. Through the Saitama Career-up program, they learned about

management policy as the program helped them build their business model and then helped make the management policy of their activity. In this way, women could grasp the business condition of their activity; therefore, this helped affirm their actions up until now and boosted their confidence in their activity management.

By participating in the program, they strengthened their information gathering. The program included a lecture on how to utilize SNS for their activity. Afterward, they utilized that knowledge to find a new market to sell their products and acquire a new customer base. Furthermore, they built a new type of group (web-based group) activity with participants of the program. The web-based group activity will be explained in detail in the next subsection.

In this way, the program has not only been able to fulfill the participation objectives such as solving individual

Table 7
Effects of Saitama Career-up Program

Questions	Answers	Explanation
Motivation for Participation	Problem Solving	Solving their activity’s problems
	Contents of Program	Individual Consultation
		Participating in study tours
Acquired Contents	Formulating Management Policy	Making a new management policy
	Reviewing Activity	Become confident about their business
	Forming RWEA Network	Meet other assertive rural women entrepreneurs
	Information Gain	Extension of market Information diffusion by SNS
Challenges after Participation	Technique and Information Gain	Attending other seminars that suit their individual problems
		Learning from predecessors working in the same business
	Networking Events	Interaction with other rural women entrepreneurs

problems but has also had positive effects such as confidence creation and formation of a new network of RWEAs.

Detail of Web-Based Group Activities

Web-based group activities were established by rural women who participated in the Career-up program. The web-based group differs from traditional groups in several ways.

In many traditional group activities, rural women cooperated by producing and selling their products. On the other hand, in web-based group activities, individual rural women entrepreneurs aim to strengthen PR and labor productivity by only cooperating with the PR and sales department.

A web-based group activity has the following characteristics: First, there are no rules or restrictions. Members of a traditional group activity hold regular meetings on food processing and decision-making. The web-based group members do not need to attend meetings. They share information on SNS instead of hosting regular meetings.

For these reasons, this group activity is considered web-based and is referred to as a web-based group in order to differentiate it from the rural women's traditional group.

Interviews with participants from the web-based group activity revealed that they felt positive about areas such as branding, personal problem-solving, expansion of sales channels, and PR promotion. Participants also indicated that they planned to be developed collaborative products in order to share each member's customers. In addition, some respondents answered that

group activities could use collective abilities to develop individual activities further. However, because web-based groups have only recently been established, a detailed investigation has not yet been undertaken. For that reason, further inquiry into the web-based group is necessary.

DISCUSSION

As it is described in Section 3.1, all the interviewees use their pre-farming careers in their individual activity. We concluded that pre-farming careers relevant to agriculture are easy to use in planning, product development, and food processing in their activity categories. On the other hand, public relations, negotiation, and selling do not depend on their activity contents. These categories are involved in all individual activities. Thus, the non-agricultural career is easy to use in these non-dependents categories. In previous research, rural women's pre-farming careers were pointed out to be utilized in financial management and selling (Katakura, 2007). However, we show that any kind of women's pre-farming careers could use in public relations, negotiation, and selling of RWEAs too.

In addition, many respondents started individual activities on their own free will. Their goals have changed from the economic independence set by MAFF to earning extra income from their family farm management. Being able to start individual activities on their own signifies that their ideas and abilities are accepted in family farm management. Likewise, it can be said that working for their family farm management

increases their level of participation. Additionally, women's pre-farming careers provide not only non-agricultural skills but also savings. The number of women with savings is increasing, thanks to salaries from their pre-farming careers. Earlier, funding for rural women, such as securing initial investment expenses, was difficult without the family's acceptance. Therefore, it was difficult for them to start their activity or to make decisions in their family farm management. This investigation reveals that rural women are currently able to establish their own activities by using their savings. Even if their activities are a part of family agricultural management, women who pay the initial investment take command of their activity's management. Hence, it can be said that the abilities and savings of rural women are helping foster rural women's empowerment. However, only their savings are not enough to cover the additional development of their activity.

By studying the Career-up program, women who participated in the program are able to address various issues such as gaining affirmation of their entrepreneurial activities, solving problems through personal consulting, and expanding their network. Although each rural woman entrepreneur faces different issues, the support they require also differs. It is, thus, difficult to make recommendations for supporting the diverse needs of the group members. One potential solution that each participant attends to most pertinent seminars individually to information gathering.

For the above reasons, the research is focused on web-based group activities that were established by rural women who participated in the Career-up program. It is believed they could improve their entrepreneurial activities through the web-based group activity. The women realize that the effects of web-based group activities, such as public relations, are being strengthened more than individual activities. Moreover, women entrepreneurs shared their customers with other members of the web-based group, such as products developed in collaboration for the expansion of sales channels. As their group activity inferred, these improved their individual activities. Additionally, it can be said that group activities have further positive effects such as the reduction in sales cost, improvement of the external image, acquisition of consulting partners, and it would be easier to receive support from the local extension center than individual activity. We think that the web-based group activity would not only solve the problems of individual activity, by utilizing members with various pre-farming careers but would also lead to women's empowerment.

CONCLUSION

This study aimed to find out the effects of women's pre-farming careers in the development of individual activities and women's empowerment. We interviewed seven entrepreneurial rural women who participated in the Career-up program. From their response, we narrowed in on two points: the effect of their pre-farming

careers on their individual activity, and the development of their activity through the Saitama Career-up program. Based on these points, we further analyzed and discussed their responses.

It is clarified that rural women utilize their pre-farming careers in all aspects of their activity (e.g., management, food processing, selling, and PR). They developed their individual activity using their non-agricultural experience and knowledge. Through the interview, we discovered two points about empowerment. First, they regarded their individual activities as benefitting the whole family agricultural management. Therefore, it can be said that women are beginning to participate in management. Secondly, they had acquired the authority of decision-making in their activity. This is because they spent their own savings for the initial investment in their activity. The savings have been earned through their pre-farming careers, which is before they entered the family agricultural management. However, if there is a shortage of funds needed to expand rural women's individual activity, we need to find a way to solve the problem in the future.-

Rural women have developed entrepreneurial activities that utilize their pre-farming career skills. On the other hand, the diversity of pre-farming careers has made providing support for their entrepreneurial activities difficult. Women are trying to solve the above problems using the web-based group. They overcome their lack of abilities by collaborating with

members who have those required skills, gained from their various pre-farming careers. Furthermore, through the interview, we were able to assume that web-based groups are more likely to benefit than individual activity, such as the promotion of public relations.

The findings of this research indicate that the pre-farming careers of rural women not only lead to the development of individual activities but also promote the empowerment of rural women. Moreover, it is presumed that the web-based group activity much improves their individual activity. The web-based group may lead to opening a new path to rural women's empowerment.

This research has its limitations because it is focused on the small and medium scale of individual RWEAs. Therefore, our results cannot be directly applied to large-scale activities. In addition, we revealed the pre-farming careers' effect only qualitatively by semi-structured interviews. Further quantitative studies need to be conducted to show what kind of pre-farming careers have how much effect on each step of RWEA.

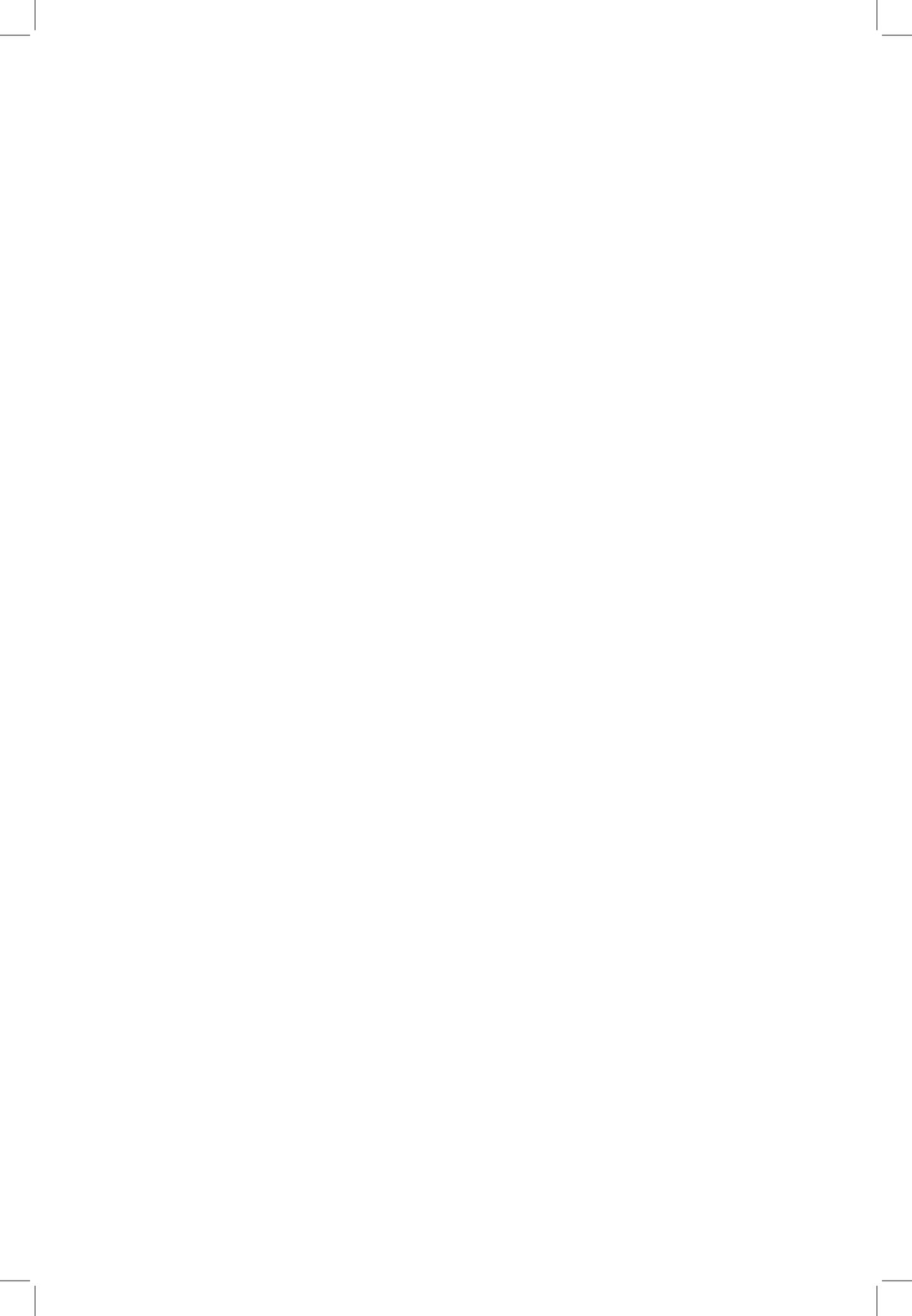
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The Effects of Country of Origin (COO) on Halal Consumption: Evidence from China

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ABSTRACT

In China, the demand for halal products is sizable. However, halal product adulteration is common, and product authenticity is doubtful due to the unknown origin of the products. To date, literature addressing China's Muslims' demand for halal products and the role of country of origin (COO) on China's Muslims' halal personal care product consumption have been limited. The purpose of this study was to explore if the COO influences China's Muslims purchase decision on halal personal care products in China. The research used the Revealed Preference Theory to determine the effects of COO on China's Muslims' purchasing decisions for halal products. Using the cross-sectional survey method, data was collected from Muslims living in northwest China and processed-analysed using a logit model application. The results of the study revealed that the COO of halal products is an important concern for China's Muslims, with other selection criteria that also influence the purchase decision. It is clear that COO is an important indication of the authenticity of halal products for China's Muslims. As well, this paper provides the notion that COO is one of the important selection criteria for (consumers' trust in the products) of halal consumption in a non-Muslim country.

Keywords: China, consumption, country of origin, halal, purchase decision

INTRODUCTION

“Halal” has become important to branding globally brand and the demand for halal products is growing rapidly, due to the rapid increase in Muslim populations and their purchasing power. “Halal” is an Arabic word that is translated as “permissible” into English. According to Shariah practices, halal is an Islamic law sourced from the Al-

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Quran and Sunnah (Al-Olayan & Karande, 2000). It could be defined as the Islamic comprehensive code of conduct, behaviour, morals, and collectively in all areas of lifestyle (Asa, 2017).

Thomson Reuters (2017) estimated that the Muslim food and lifestyle sector was worth US \$2 trillion in 2016 and is expected to reach US \$3 trillion by 2022. In service sectors, research has shown that Islamic facilities have a significant impact on the expanding tourism and finance industries (Abror et al., 2019; Talib et al., 2014). This remarkable growth has caused enthusiasm in Muslim and non-Muslim companies around the world seeking ways to capitalise on the potential gigantic market. For instance, special shampoos were introduced by the world's most renowned personal care product companies to address the itchy scalp and unpleasant odour caused by the lack of ventilation under a headscarf (Evans & Reeg, 2014).

The escalating halal market brings with it the expansion of the halal industry in non-Muslim countries such as China. China has the ninth-largest Muslim population in the world (Edbiz Consulting, 2013). Its halal industry is growing at an average rate of 10 percent annually, contributing USD 2.1 billion worth of market value (Yang, 2013). The growth and modernisation of China's economy and the abundant supply of new halal products locally and internationally have great bearing on China's Muslim consumption patterns (Gillette, 2000).

Mass urbanisation and the great leap in income levels has resulted in the emergence of middle-class urban consumers in China,

who now have greater purchasing power for more refined goods and services than before. China's Muslims have become more brand and quality conscious, and also more price-conscious, making them more aware of the COO and packaging (Liu et al., 2010; Xiao & Kim, 2009). Halal brands are numerous in China, originating from both the Muslim and non-Muslim countries. These brands were certified by different halal certification bodies from various countries, where the certification standards may not be consistent with each other. Hence, the COO of halal products is an indication of the extent of the reliability (Abdul et al., 2009), and the traceability of the authenticity of halal products for Muslim consumers (Zailani et al., 2010).

Essentially, the practice of halal consumption is associated strongly with Muslim Islamic practices. China's Muslims hold strongly to the Islamic belief and customs which influence their consumption behaviour greatly (Zhu, 2011). Incidents of violations of the halal content of halal products in China are common. For example, it is not unusual in China for pork to be sold as beef (Khaliq, 2013). These happenings have aroused anger and anxiety among China's Muslims, who are worried about the authenticity of the halal logo on halal products. They yearn for more stringent control of the certification process for halal products in Muslim and non-Muslim countries throughout the world (Wu et al., 2014).

China's Muslims are concerned with food authenticity and adulteration and are determined to get halal products from

only trusted sources (Hong et al., 2019). Concurrently, the increasing demand for halal products has prompted China's government to seek global expertise to assist in the organisation and upgrading of its halal industry or to collaborate with locals in the halal trade (China Daily, 2014; Salama, 2011). This denotes a great opportunity for global halal exporters to penetrate China's untapped and potentially huge market.

Little is known about China's Muslims' consumption of halal products. There are a number of studies on Muslim halal consumption behaviours worldwide (Dubé et al., 2016; Muhamad et al., 2017), but most studies did not focus on Muslim halal consumption in non-Muslim countries, in particular, China. Zhu (2011) commented that there had been a lack of systematic and scientific study on China's Muslim halal consumption behaviour. While many halal producers in the world are eyeing this new business opportunity, many producers are ignorant of China's Muslims' preferences and their perceptions of imported halal products (Ma, 2014). Numerous questions await study and answers, which include: How confident are China's Muslims in the imported halal products? How far afield are China's Muslims willing to buy imported halal products? Is COO an important criterion during the purchase decision?

Hence, this paper attempts to provide answers to the above questions, in particular, it examines if China's Muslims are confident with imported halal personal care products, and the role of COO in influencing their purchase intentions. The degree of influence of COO on China's Muslims' purchase

intentions is a key issue in the field of international business and trade (Hermelo & Vassolo, 2012). It is of particular relevance to halal small and medium enterprise exporters from Malaysia and other South-east Asian countries (Ismail et al., 2013). The findings from this study might assist global halal exporters to strategise for their export of halal products to China and other non-Muslim countries.

This paper starts with a discussion on the influence of COO on halal consumption. This is followed by a discussion of the Revealed Preference Theory from the economic perspective. The third section focuses on the approaches used to identify the extent of the influence of COO on China's Muslims' halal consumption behaviour. The findings of this study are presented in the last section.

LITERATURE REVIEW

Country of Origin and Halal Consumption

Consumers' purchase intentions are continuously provoked by a wide range of product attributes. Nielsen (2016) noticed that COO of a product was a bigger driver of consumer choice than price, packaging, and style. Studies have shown that COO affects consumers' evaluation of a product, and it is an important extrinsic cue that can assist consumers when making judgements about the quality of a product (Bonroy & Constantatos, 2015; Hsu et al., 2017). COO should be emphasised in brand communication campaigns for a product/service (Herz & Diamantopoulos, 2017).

COO refers to the country of origin where the product (or brand) is being invented or manufactured, which is also commonly represented by the phrase “made in” (Ha-Brookshire & Yoon, 2012). Geographical closeness might lead to a more positive COO due to greater familiarity (Thøgersen et al., 2017). The actual purchase of meat has been found to be increasingly influenced by the COO of the product due to increased awareness and concerns over food quality and safety (Ali et al., 2017; Roth et al., 2008). The role of COO can also be extended to accounts of how the culture impacts consumers’ engagement with communities (Andéhn & Decosta, 2018).

COO has been known to have an impact on consumers’ consumption since 5 decades ago (Hooley et al., 1988). An earlier study by Bilkey and Nes (1982) asserted that consumers chose the best product that met their needs through information associated with the COO of the product. The idea behind COO is that consumers tend to form perceptions of a product’s quality based on a country’s known skills and expertise (Costa et al., 2016). For example, in Sitz et al.’s (2006) study, they noted that COO managed to influence consumers’ consumption behaviour through opting for a steak labelled “USA Guaranteed”. Similarly, consumers might have higher confidence with cars made in Germany and electrical appliances manufactured in Japan. In this case, consumers treat a nation as a brand (O’Shaughnessy & O’Shaughnessy, 2000). Studies also confirmed the fact that COO plays an important role when it comes to the

purchasing of luxury products (Coudounaris, 2018). In short, consumers’ perceptions of various products are contingent upon their inferences about the specific country (Insch & McBride, 2004).

Likewise, COO is also a signal of reliability and authenticity for Muslim consumers (Abdul et al., 2009). Commonly, Muslims associate COO with a halal credential, and seek products from countries that are Shariah-compliant and trustworthy, such as Malaysia, Pakistan, and Indonesia (Borzooei & Asgari, 2015). COO helps consumers to distinguish products from Muslim and non-Muslim producers. Frequently, Muslims have higher confidence with halal products which originated from a country with higher credibility in matters related to religiousness. They are less likely to purchase products that they lack prior information about and or lack confidence in the authenticity of the products (Tarak & Kilgour, 2015).

Rios et al. (2014) mentioned that consumers were more confident with halal products originating from the Middle Eastern countries compared to Indonesia and Malaysia. Supramaniam et al. (2017) revealed that Muslim consumers considered the COO as an important cue that influenced their judgement of the products. Muhamad et al. (2017) conjectured that consumers used the information on COO to assess the halal logo’s credibility in delivering the halal food standard. According to Hussin et al. (2013), a halal logo or label is seen as a convincing factor for halal cosmetics or toiletries products purchased in Malaysia.

In contrast, Muslim consumers have low positive perceptions of products from England although they are labelled halal because England is not a Muslim country (Maison et al., 2018).

Furthermore, it was found that elderly people, rural folks, and highly educated people all seemed to have less confidence with the food produced in non-Muslim countries, or in products with unfamiliar brands as well as in products that contained ambiguous ingredients (Rezai et al., 2012). From this perspective, it can be seen that consumers actually consider seriously the COO of a product when making their purchase decision.

From the marketing perspective, studies have also proven that COO is significant in influencing the halal purchase intentions, whether through COO itself or through the brand or halal logo that carries information of the COO (Rios et al., 2014). Both brand and COO information are often used by consumers to reduce the complexity of tasks involved in information processing when consuming halal products (Supanvanij & Amine, 2000). In other words, consumers might not be aware of where the product was made, nevertheless, the association of the brand and the halal logo with COO is commonly observed in the halal market (Muhamad et al., 2017).

Brands from countries with a positive halal image have a better chance of being assumed to be a good halal product than others. A general assumption in the branding literature recommends that a favourable brand image will have a positive impact on

consumers' behaviour towards the brand, in particular, the trust in the quality of the products, which in this case, refers to the authenticity of halal products. Thus, as demonstrated by Aziz and Chok (2012), a brand is an important determinant for halal purchase intention.

Individual Choice: An Economic Perspective

Most halal consumption studies focused on understanding the intention to consume or purchase halal products, and many of them were conducted in Muslim countries (Alam & Sayuti, 2011; Ansari & Mohammed, 2015; Muhamad et al., 2017; Phuah & Jusoh, 2013;). There is a dearth of research in examining the roles of COO on China's Muslims' halal consumption, and there is also there is a lack of application of economic theory in the studies (Hong et al., 2019).

Many researchers tried to examine Muslim consumption behaviour with the stated preference method but found no direct effect of COO on halal consumption behaviour (Borzooei & Asgari, 2015; Verbeke et al., 2013). A possible reason may be due to the limitation in the number of products and brands that are available to respondents during the test, as data was collected based on observation in a simulated shopping environment. Borzooei and Asgari's (2015) study revealed that most respondents made their choices based on taste, price, and packaging, rather than the COO. However, they observed that the respondents actually had prior knowledge of

the differences in the halal brands produced by Muslim and non-Muslim countries, and also the differences in the authenticity of halal products among Muslim countries.

Commonly, the concept of utility is employed to study or model the consumption behaviour in economics, particularly in the study of consumer choices. In these models, studies use information such as budget and consumer preference to predict the choices that the consumers will make. In reality, the utility is subjective, individual, and hard to quantify. Hence, the Revealed Preference Theory was developed in the 1930s by Samuelson in an attempt to explain consumers' consumption behaviour without taking utility into consideration (Wong, 2006). This approach is a better way to infer the preferences of individuals given the observed choices or consumption experience.

Product attributes form a product's identity, which influences consumers' perception of it. Leigh and Gabel (1992) noted that consumers might be influenced by their interaction with society or significant symbolic product attributes, such as brand, product origin, and logo. Hence, it is interesting to note how China's Muslims respond towards products originating from different countries, as well as how income, the origin of the product and other product attributes affect the buying decisions of this group of consumers.

In this study, we have applied the Revealed Preference Theory to transform observed choices into information about consumers' preferences. We observed that

China's Muslims' choices of halal personal care products were based on their purchasing experience and used this information to learn if COO could be one of the main factors that determine the preference of China's Muslims' halal consumption.

The MS 2200:2008 Islamic Consumer Goods Standards (Malaysian Department of Standards, 2008) defines halal cosmetic and personal care products as:

“Any substance or preparation intended to be placed in contact with various external parts of the human body (epidermis, hair system, nails, lips, and external genital organs) or with teeth and mucous membranes of the oral cavity. The functions of these items are exclusively or mainly to cleaning them, perfuming them, changing their appearance and/or correcting body odours and/or protecting them or keeping them in good condition. The products are not being presented as treating or preventing disease in human beings”.

The MS 2200:2008 Islamic Consumer Goods' standards are derived from Quran, Sunnah (the reported sayings, actions, silent approval and attributes of Prophet Muhammad PBUH), Ijma' (consensus of Muslim scholars or ulama'), Qiyas (analogy derived from Quran), and Ijtihad (the personal opinion or judgement from ulama' based on Quran, Sunnah and Ijma') (Rahim et al., 2013). It has differentiated sources of halal personal care products into

5 categories, namely, animals on land and water, plants and microorganism, land and water, alcohol and synthetic ingredients.

Halal personal care products for this study refer to body care goods and toiletries permitted to be used under the Islamic teachings, e.g. soap, toothpaste, perfume, shampoo, body lotion, and hair gel. If COO is an important selection criterion, then, further study is needed to determine which COO is preferred by China's Muslims. If the market resists imported products, then huge efforts will be needed in order to penetrate this market.

The Revealed Preference Theory asserts that purchasing decisions are based on consumers' perception that they can get a bundle of benefits within a given budget. The theory entails noting that if a consumer purchases a specific bundle of goods, then that bundle is "revealed preferred," given constant income and prices, over any other bundle that the consumer could afford. By varying incomes or prices, or both, an observer can infer a representative model of the consumer's preferences for a product.

In other words, at a given price and income, if an item is purchased rather than another, a consumer will always make the same choice each time the consumer makes a purchase. If a consumer purchases a particular type of goods, then the consumer will be less likely to purchase a different one unless it provides more benefit at a lower price, having a better quality, or providing added convenience. In summary, the theory is able to predict consistently what consumers will purchase and what their preferences are.

Hence, the Revealed Preference Theory permits us to examine if COO plays a vital role in China's Muslims' choice of halal personal care products. By observing respondents' choices of products at different levels of income, the COO and some other indicators through the use of a questionnaire survey, it is theoretically possible to construct a China's Muslims' consumption model for halal personal care products.

METHODS

Data

Muslims in China are estimated to be more than 30 million (Ma, 2014). Krejcie (1970) suggested that sample size increased at a diminishing rate as the population size increases, and the sample size remained relatively constant at slightly more than 384 samples when the number of the population reached one million. Hence, our targeted sample size should be at least 384, or slightly higher. Thus, we collected 450 surveys from three provinces in northwest China.

Data was collected through a structured survey questionnaire to ensure that each interview was presented with exactly the same questions in the same order. The survey was conducted in Muslim-majority provinces in China; namely, Shaanxi province and Gansu province, and Ningxia Hui Autonomous Region (Ningxia province). As the statistics on China's Muslim households are not available, hence, the non-probability sampling method was applied for this study. We tried to incorporate some elements of randomness through

diversity sampling by adopting purposive and convenience sampling methods.

A total of 450 responses were collected over a six-week period. The majority of respondents were above 25 years old (54.2 percent of the total sample), and about 45.8 percent were age 25 or below. A total of 62.1 percent of the respondents were from urban areas, and slightly more than half of the sample (52 percent) were female. In terms of income, 22.4 percent of the sample fell into the income category below RMB18,001 per annum, and about 77.6 percent of the sample has an income level equal to or more than RMB18,001. Overall, the sample was weighted towards younger respondents and there was an over-representation of respondents with higher education (44.5 percent).

Variables

A description of the variables employed in the study is provided in Table 1. Formulating the nine variables was straightforward. Purchase is the unit of analysis which takes a value of 1 if the respondents purchased halal personal care products (“halal purchases” will be used to represent “purchase of halal personal care products” from this section onwards), and 0 if otherwise. As this is an exploratory study, we only distinguished between purchase and non-purchase, with making no attempt to measure the quantity and the number of times of purchases by an individual. *PreferL*, *Cri_Cert*, and *Cri_COO* are explanatory that were employed to determine if COO plays a role in China’s Muslims’ halal purchases.

PreferL is an independent variable that takes the value of 1 if respondents preferred locally produced halal products when making halal purchase decisions. *PreferL* is employed to test if COO has an effect on halal purchase decisions. It can be explained by the action of a consumer when making the purchase. The function of COO automatically takes place when a respondent has a preference for using the source of a product as a selection criterion. If a respondent prefers to buy a local product, it indicates that the respondent was more confidence in local products.

Cri_Cert is an independent variable that takes the value of 1 if halal certification is one of the three most important criteria of halal purchase decisions. Halal certification is a relatively new concept for China’s Muslims, who have been plagued with food safety and quality issues. The introduction of the halal certification might be a good practice that provides some guarantee of food quality for China’s Muslim population; this has to be proven by further research. Zhu (2011) noticed that China’s Muslims associated the halal certification with imported products, or a marketing strategy employed by foreign halal producers to promote sales.

In addition to *PreferL* and *Cri_Cert*, *Cri_COO* is another variable introduced to examine the roles of COO in China’s Muslims’ halal purchase decisions. It takes the value of 1 if COO is one of the three important criteria of halal purchase by China’s Muslims.

Table 1
List of variables used in the study

Variable	Description	Categories/range
<i>Purchase</i>	Purchased halal personal care products (Dependent variable of the study)	1 if the respondent purchased halal personal care products, 0 otherwise.
<i>PreferL</i>	Prefer products from local producers	1 if the respondent preferred local produced halal products, 0 otherwise.
<i>Cri_Cert</i>	If COO is the most important purchasing criteria	1 if halal certification was one of the three most-important halal purchasing criteria; 0 otherwise; 0 otherwise
<i>Cri_COO</i>	If COO is the most important purchasing criteria	1 if the country of origin was one of the three most-important halal purchasing criteria; 0 otherwise
<i>Gender</i>	If the respondent is a female	1 if the respondent is a female, 0 otherwise.
<i>Education</i>	Years of education	The number of years of education of the respondent.
<i>Income</i>	The annual income of the respondent. The average annual income of people in northwest China is estimated at RMB18000 per annum.	1 if annual income is more than RMB 18,000, 0 otherwise.
<i>Home</i>	If the respondent from the urban area	1 if the residence is in the urban area; 0 rural area

Income is an important variable in the Revealed Preference Theory. As specified by the Marshallian demand function, consumers' choice sets are assumed to be defined by income and prices (Zaratiegui, 2002). Income might determine how a consumer perceives the price level of a product. We divided income into two categories: below or equal to, and above RMB 18,000 (USD2600) per annum, based on the statistics for an average annual urban family's income in northwest China (Wong, 2013).

Sociodemographic factors, such as age, gender, education, and income are most commonly found to affect consumers'

purchase decisions in consumption studies (Ajzen, 1991; Phan et al., 2019). China is a vast land country with much disparity in culture, ethnicities, infrastructure, and income. Imported halal products may only be available in urban areas. Hence, we include income (*Income*), gender (*Gender*), educational background (*Education*) and place of residence (*Home*) as independent variables in the study.

Model Specification

As the dependent or response variable of this study is dichotomous in nature, taking a 1 or 0 value, we apply the logit model to test the hypotheses, as below:

$$\text{logit}(p) = \log\left(\frac{p_i}{1-p_i}\right) = Z_i = \beta_0 + \beta_i X_i + \varepsilon_i$$

where Z_i is a set of independent variables that might influence the halal purchases.

Data collected via the survey were run with a logit regression model in the form as below:

$$\text{Log} \left[\frac{P}{1-P} \right] = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k + \varepsilon$$

where P is the probability of a respondent purchasing halal personal care products; the Xs are explanatory variables hypothesised to influence the probability of halal purchases; β s are the coefficients of the explanatory variables; and ε represents the stochastic disturbance term. The dependent variable in the equation is dichotomous and measures whether the respondent purchases halal personal care products (value = 1) or otherwise (value = 0). Thus $P/(1 - P)$ might be interpreted as the ratio of the probability that the respondent will purchase to the probability that he/she will not.

Overall, the model tested the relationship between factors determining China’s Muslims’ halal purchases; in particular, the influence of COO, income and other sociodemographic characteristics of China’s Muslims’ halal purchases. Multicollinearity among variables was tested. All correlations are less than 0.5, and standard errors of coefficients are in normal ranges. On the other hand, with a p-value of 0.2916, the Hosmer and Lemeshow’s Goodness-of-fit test indicates that our model fits the data well.

RESULTS AND DISCUSSIONS

The estimated coefficients, with their standard errors, are reported in Table 2. The

Wald χ^2 statistics was 74.14 with a p-value of 0.000, suggesting that the estimation was overall significant. The *link-test* was implemented immediately after the logit regression for model specification, and the test indicated that there was no problem with the specification.

This study represented an exploratory attempt to identify the roles of COO in China’s Muslims’ halal purchase decisions. Overall, *PreferL*, *Education*, and *Home* were significant at the 1 percent level, and *Gender* was significant at 5 percent level. However, *Cri_Cert* and *Cri_COO* played no role in influencing halal purchases.

We had an odds ratio of 2.5 for *PreferL* on halal purchases, which implied that halal purchases were 2.5 times more likely to occur in-among consumers who preferred locally produced halal products. The result reveals that China’s Muslims were concerned with the COO of halal products, and they preferred local manufactured halal products over imported ones. Indirectly, the result indicated that COO plays a significant role in influencing China’s Muslims’ halal consumption in terms of helping them to distinguish the sources and the authenticity of halal products. Overall, China’s Muslims were reluctant to accept foreign halal products. However, COO (*Cri_COO*) and halal certification (*Cri_Cert*) were not

Table 2
The coefficient estimates and odds ratio

Variable	Coefficient	Std. Error	Odds ratio	Std. Error
Constant	-2.239 ***	0.376	0.107 ***	0.040
PreferL	0.785 ***	0.215	2.469 ***	0.530
Cri_Cert	-0.110	0.223	0.896	0.200
Cri_COO	0.982	0.895	2.670	2.388
Gender	0.486 **	0.213	1.626 **	0.346
Education	0.106 ***	0.023	1.112 ***	0.026
Income	0.308	0.256	1.361	0.348
Home	0.759 ***	0.222	2.137 ***	0.474
Number of observation		444		444
Wald chi2 (7)		74.140		74.140
Prob > chi2		0.000		0.000
Pseudo R2		0.121		0.121
Log pseudolikelihood		-269.062		-269.062

Note: *** significant at 1% level, ** significant at 5% level, * significant at 10% level

among the three most important criteria in determining China's Muslims' purchase intentions.

Major findings and corresponding proportions of the 245 respondents who provided the reasons for preferences on local products are given in Table 3. Among 245 respondents, 44 percent of the respondents revealed that they had higher confidence with the authenticity and the quality of local halal products. Table 3 provides the top five main criteria which influence China's Muslims' purchase intentions. Three out of five of the criteria were skewed to a similar reason, that is, the trust in the authenticity of the products. Price and familiarity with the local halal products as well as accessibility and availability of local halal products (4 percent) were other concerns of the respondents. About two percent of the respondents stated that they were not

familiar with and confident in imported halal products.

Nonetheless, out of 450 respondents that answered the question if they would purchase imported ready-made or processed halal food, about 54 percent of the respondents reacted positively. Among respondents that preferred imported products (162 responses), around 90 percent of the respondents indicated a preference for products from Muslim countries. Only 10 percent of the respondents preferred halal products from countries with a good reputation for product safety, such as Australia and Europe. These results indicate that halal products from Muslim countries, such as products from Malaysia, are well-trusted by China's Muslims and hence, products from Muslim countries have better chances to penetrate this market than companies based in non-Muslim countries.

Table 3
Reasons for preferences for local products

No.	Reasons	Percentage
1	Confident with the authenticity and quality of local products	44
2	Familiar with local products	13
3	Local halal products are reliable	10
4	Understand the production process and the source of products	7
5	Local products are cheaper in price	7
6	I live in a Muslim populated area	4
7	Local products are more suitable for local preferences/taste	4
8	Convenient and easy access	4
9	Support local business	2
10	Certified halal	1
11	Fresh	1
12	Do not familiar and confident with imported products	2
13	Others	2
Grand Total		100

Education was significant at the 1 percent level. The odds of halal purchases increased by 11 percent with every additional year of education. This finding was consistent with the study by Phuah and Jusoh (2013), which asserted that Muslims with more years of education had a higher intention to use halal cosmetics and personal care products. The results also suggested that people with higher education tended to be more knowledgeable and well-informed about product availability and choices.

The place of residence has also influenced halal purchases. As mentioned previously, halal products might only be available in the Muslim populated areas in China. In addition, halal personal care products are not common in China (Hong et al., 2019). Hence, halal personal care products might only be available in urban areas. The significance of *Home* supported

this argument. China's Muslims who live in the urban areas were two times more likely to buy halal personal care products compared to those in rural areas.

Further, gender also plays an important role in halal purchase decisions. Results showed that the probability of making halal purchases might be increased by 11 percent if the buyer was a female. This is consistent with Eze and Tan's (2012) study which noted that women were more concerned with product quality, brand image and product knowledge than price, and they were more willing (than men) to pay for high-quality cosmetics and personal care products. Yusof and Duasa (2010) recognised that younger generations and urban residents tended to spend more on outside food, clothing and personal care products. Interestingly, women's total expenditure on these products is much higher than men.

In terms of income, unsurprisingly, it does play some roles. This is consistent with most halal consumption studies (Alam et al., 2011) which suggested that regardless of income status and price, Muslims have the obligation to consume halal products even if the halal products might sometimes be more expensive than ordinary products in some places (Dali et al., 2009).

IMPLICATIONS

COO, which indicates the source of the halal products and the authenticity of halal products implicitly, is found to influence customers' evaluation of halal products. The findings of this study signify that China's Muslims are highly concerned about the source for halal products they consume. The overwhelming issues in food and product safety in China might have affected China's Muslims' consumption patterns and choice, as it was noted that they are particularly careful with the sources of products that represent the authenticity of a halal product. The fact is that China's Muslims prefer to buy halal products from reliable local sellers; this ethnocentric consumer behaviour implies that the foreign exporters of halal products need to put in more effort in order to penetrate China's halal market. Hence, new marketers are advised to try to make their products appear more trustworthy, e.g. explicitly highlights the local origin of the halal ingredients used in their products (Fischer & Zeugner-Roth, 2017).

Since China's Muslims have higher trust in local halal marketers and distributors, and the acceptance rate of China's Muslims on

products sold by these agencies is higher compared to products sold in supermarkets or common markets that are not familiar to them, collaboration and partnership with local halal marketers and distributors to promote imported halal products is a viable option. This effort would be likely to accelerate the penetration of imported halal goods into China's markets.

Other than that, collaborating with credible local Islamic organisations or government agencies could also help to increase market penetration rate and at the same time would add value to the halal quality standards. At present, China's Muslims have limited knowledge and trust in the halal certification system in the country, which is unfledged and less established (Gooch, 2010). Product adulteration and the misuse of the halal logo are common in the country. Thus, consumers resort to buy halal products recommended by religious leaders or Muslim friends, or from familiar and reliable sellers regardless of whether there is a halal logo or halal certification (Ariffin et al., 2016). Hence, collaboration with credible local Islamic organisations or government agencies to promote certified halal products will cultivate trust among China's Muslims.

Finally, marketers operating in Muslim markets have to re-examine their marketing communication strategies, such as the use of religious symbolism on product packaging, or recruiting of Muslim employees or managers, which might be attracting or alienating Muslim consumers (Richardson & Ariffin, 2019). Building and gaining the

trust and confidence of China's Muslims are likely to be timely and costly. However, given the potential, such an investment might be justified.

CONCLUSIONS

Based on our surveys in several Muslim-populated regions in northwest China, this paper examined the roles of COO in halal purchases of China's Muslims. Our findings confirmed that COO is an important selection criterion for China's Muslims because COO is an indication of halal product authenticity. In addition, it is proven that among the seven potential influential factors, four factors were found to have significant positive impacts on halal purchase decisions, namely, preference for locally produced halal products, consumers' education level, urban or rural setting, and gender.

In addition, this study disclosed that China's Muslims prefer halal products which originate from Muslim countries, which indicates their serious concern about halal credential. The study also revealed that urban female Muslims with higher educational levels are more likely to consume halal personal care products.

Finally, as this is the first attempt to explore the roles of COO in China's Muslim halal purchase decisions, this study is not free from limitations. More studies would be needed to provide further verification or to evaluate whether the effects of COO on halal purchases could be explained by other variables. A more comprehensive

framework is needed to examine if the COO effects could be reflected through proxy variables, such as halal logo, brand, and halal certification. Further, some issues concerning China's Muslims' consumption of halal products require further research, in particular, China's Muslims' knowledge and awareness of halal certification.

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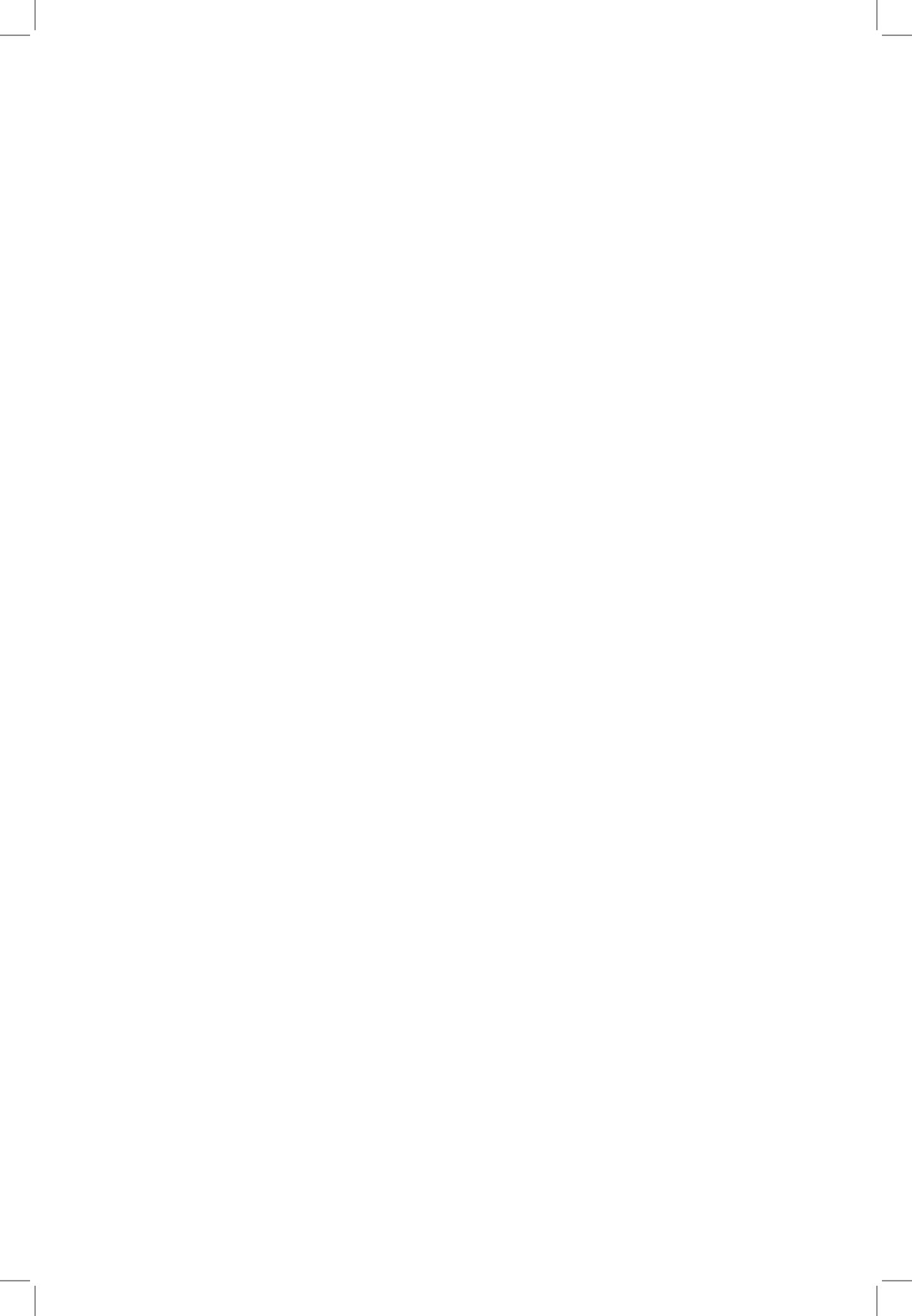
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Factors Affecting Adult Overweight and Obesity in Urban China

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ABSTRACT

This paper aims to examine the factors determining adult overweight or obesity in rapidly developing urban China. Quantitative analysis was performed using individual questionnaire data from the Survey for the Purpose of an Estimation of Preference Parameters conducted by Osaka University in six urban cities, Beijing, Shanghai, Guangzhou, Chengdu, Wuhan, and Shenyang. The estimation results of relative-risk ratios by the multinomial logistic regression model showed that 1) women and those whose subjective satisfaction with health were poor tended to be lean; 2) men, middle-aged or elderly people, those eating meals at irregular times, and those with a lower relative standard of living compared to others living around them tended to be overweight; and 3) men, middle-aged or elderly people, those with a strong sense of stress and depression, those with a lower level of subjective satisfaction with daily life, and those with lower or higher annual household incomes tended to be obese. However, the frequency of physical exercise and education level, which were pointed out by previous studies to be determinant factors of overweight and obesity, are not significant. It is recommended that various preventive measures targeting high-risk groups be introduced and promoted.

Keywords: Body mass index, China, lifestyle diseases, non-communicable diseases, obesity, overweight

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INTRODUCTION

In China, which has the world's second-largest economy, consumers' living standards have greatly improved with rapid economic growth led by the manufacturing and service sectors in recent years. As a result, dietary habits have been dramatically westernized (Hsiao, 2013) from traditional carbohydrate-centric diets to high-fat and high-calorie diets (Du et al., 2004; Su et

al., 2015). In addition, it is widely reported that less energy-consuming lifestyles, such as those involving increased sedentary time and usage of electronic devices such as smartphones, tablets, personal computers, and videogames, have been pervasive particularly in rapidly developing urban areas (Dong et al., 2017). Due to these changes in dietary and lifestyle habits, the proportion of overweight and obese people is increasing for both men and women (Su et al., 2015). As a result, the prevalence rate of noncommunicable or lifestyle diseases such as cardiovascular diseases, diabetes, and hypertension is higher in the order of China > Korea > Japan in East Asia (Ma et al., 2017). At the moment, addressing the increasing number of diseases and preventing adult overweight and obesity have become an urgent policy issue in China.

For this reason, a wide range of research on overweight, obesity, and noncommunicable/lifestyle diseases has been done actively in China in recent years. Previous Chinese studies can be broadly divided into 1) studies on factors resulting in overweight and obesity; 2) studies on factors resulting in noncommunicable/lifestyle diseases; and 3) studies on factors affecting dietary behavior that have been highly associated with overweight, obesity, and non-communicable/lifestyle diseases.

The first study mentioned above, which is most closely related to our study, points out that the factors associated with overweight and obesity include excess calorie intake or carbohydrate, lipid, and

protein intake along with the westernization of diets (Hu et al., 2002; Ma et al., 2017; Su et al., 2017); rising age (Hu et al., 2002; Su et al., 2017; Zhou et al., 2017); marital status (Hu et al., 2002; Zhou et al., 2017); education level (Hu et al., 2002; Su et al., 2017); income and economic levels (Hu et al., 2002; Su et al., 2015, 2017); less frequent physical exercise (Dong et al., 2017; Hu et al., 2002; Su et al., 2015, 2017; Zhou et al., 2017); long television viewing time (Dong et al., 2017); lack of sleep (Gong et al., 2017; Su et al., 2017); more frequent eating out (Dong et al., 2017); less frequent eating of vegetables and fruits (Dong et al., 2017); more frequent eating of snacks and nocturnal meals (Watanabe & Yu, 2016), smoking (Hu et al., 2002; Su et al., 2017), and drinking alcohol (Hu et al., 2002; Su et al., 2017); misunderstandings of parents and grandparents about the appropriate weight of children and grandchildren (Jiang et al., 2007; Shi et al., 2007); and place of residence (Su et al., 2017).

However, while Hu et al. (2002) pointed out that the higher the education level, the higher the obesity level for both men and women, Su et al. (2017) reported the negative correlation between education and obesity level for women. Moreover, various contradicting results of the relationship between income levels or economic status and overweight/obesity prevalence have been reported. For instance, although Hu et al. (2002) found, irrespective of gender, a person in the higher-income group was more likely to be overweight/obese, Su et al. (2017) found the significant correlation

between income levels and overweight/obesity only for men, and Zhou et al. (2017) insisted a person in the lower-income group was more likely to be overweight/obese. In addition, although review articles conclude that depression and chronic social stress are likely to increase the risk of developing obesity in the USA (Luppino et al., 2010; Scott et al., 2012), whether depression and stress lead to being overweight or obese has not been well studied in China. In a situation where tackling overweight and obesity along with rapid economic growth has recently become one of the urgent social issues in the country, it is necessary to compile research findings on factors determining overweight and obesity not only to better understand the background of the widely pervasive overweight and obesity from the viewpoint of public health study but also to map out preventive measures in China as well as other Asian countries showing rapid economic growth.

Therefore, this study aims to examine the factors affecting adult overweight and obesity in urban China using individual data from the Survey for the Purpose of an Estimation of Preference Parameters (SPEPP).

MATERIALS AND METHODS

We used individual questionnaire data from the SPEPP conducted by Osaka University in urban areas of China. In the SPEPP, adult men and women between the ages of 20 and 69 (in the year of 2009) who lived in Beijing, Shanghai, Guangzhou, Chengdu, Wuhan, and Shenyang, the country's six major cities,

were surveyed annually from 2009 to 2013 by home-visit questionnaire survey. The survey was conducted on 1,380 people (6 cities \times 5 age groups \times men and women \times 23 persons) who were randomly selected within each district after the number of samples to be collected was determined according to the population composition of each randomly selected district. This study used only the year 2013 data, which provided information on dietary and lifestyle habits. Data from 818 respondents who answered all the questions we needed were used for the analysis.

In the SPEPP, only height and weight were asked about the extent of overweight/obesity. Therefore, the extent of overweight/obesity is measured based on Body Mass Index (BMI), which can be calculated by body weight in kilograms divided by height in meters squared. In most countries, based on World Health Organization (WHO) criteria, it is common to classify those with BMI of less than 18.5 as being lean or underweight, those with BMI of 18.5 or more and less than 25 as being normal, those with BMI of 25 or more and less than 30 as being overweight, and those with BMI of 30 or more as being obese. However, WHO Expert Consultation (2004) recommends that the cut-off points for Asian people be set at approximately 2 to 2.5 below the standard cut-off points since the above standard cut-off points are based on European people. Thus, for convenience in this study, those with BMI less than 18.5 were classified as being underweight or lean, those with BMI of 18.5 or more and less than 23.5

were classified as being normal, those with BMI of 23.5 or more and less than 27 were classified as being overweight, and those with BMI of 27 or more were classified as being obese. Subsequently, a multinomial logit model was applied to determine factors affecting adult overweight and obesity in China. The dependent variable is the four categories of body weight (being underweight [BMI < 18.5], normal [$18.5 \leq \text{BMI} < 23.5$], overweight [$23.5 \leq \text{BMI} < 27$], and obese [BMI ≥ 27]), using the normal body weight as a reference category.

Considering the findings of previous studies and the limitations of questions in the survey, we used the following explanatory variables: dummy for gender (male = 1, female = 0), dummy for age group (20s [reference], 30s, 40s, 50s, and 60s or over), dummy for education level (junior high school [reference], high school, and college/university), eating meals at regular times (always = 5, very often = 4, sometimes = 3, rarely = 2, never = 1), sleep time (hours), frequency of physical exercise (every day = 5, 2–4 times a week = 4, once a week = 3, once a month = 2, rarely = 1), stress and depression intensity (details mentioned later), subjective satisfaction with health (very good = 5, good = 4, so-so = 3, poor = 2, very poor = 1), subjective satisfaction with daily life (details mentioned later), relative living standards compared to those living around the respondent (much higher than yourself = 5, higher than yourself = 4, roughly as much as yourself = 3, lower than yourself = 2, significantly lower than yourself = 1), and dummy for annual

household income (less than 50,000 yuan, 50,000 yuan or more but less than 75,000 yuan, 75,000 yuan or more but less than 100,000 yuan [reference], 100,000 yuan or more but less than 125,000 yuan, and more than 125,000 yuan). As for stress and depression intensity, we used the sum of the answers for the following four questions: 1) Do you feel stress recently?, 2) Do you feel depression recently?, 3) Do you have difficulty in sleeping recently?, and 4) Do you feel lonely recently?" (always = 5, very often = 4, sometimes = 3, rarely = 2, never = 1). Subjective satisfaction with daily life is calculated by summing the answers for the extent of satisfaction with daily life in general, region in which the respondent lives, leisure time, current economic wellbeing, and relationships with friends (all of which are satisfactory = 5 to unsatisfactory = 1 on a Likert scale). The weighted values of Cronbach's alpha are 0.846 for stress and depression and 0.781 for subjective satisfaction with daily life, suggesting internal consistency.

We used sample weight provided by Osaka University to estimate finite population regression coefficients.

RESULTS AND DISCUSSION

Before going into the estimation results in detail, we took a look at the proportions (weight-adjusted) of being lean, normal, overweight, and obese. The proportions were 5.6 percent for underweight, 60.0 percent for normal weight, 25.6 percent for overweight, and 8.8 percent for obesity,

indicating that approximately one in every three Chinese adults living in surveyed urban areas was estimated to be overweight or obese. The mean BMI was 23.2 (weight-adjusted), which is just below the cut-off point between normal and overweight.

Next, we look at the results of the estimation results by multinomial logistic regression. Table 1 shows the estimated values of the coefficient and relative-risk ratio (RR). In a case when the RR or coefficient is not significant, the explanatory variable does not have a significant relation with being lean, overweight, or obese. On the other hand, in a case when it is significantly larger (smaller) than 1, the explanatory variable increases (suppresses) being lean, overweight, or obese. As for the estimation results for underweight, RRs were significant for the dummy for gender and subjective satisfaction with health. The RR of the dummy for gender was significantly less than 1 (RR = 0.235), indicating that men were 76.5 percent less likely than women to be underweight; in other words, women are more likely to be thinner than men. Similarly, in Japan, which is an advanced country in East Asia, it is pointed out that women are more likely to prefer being slim than men and are actually thinner (Ministry of Health, Labour and Welfare, 2018). Even in the rapidly growing urban areas of China, women's tendency to be thin is prominent (Lee & Lee, 2000), and attention should be paid to the impact of women's underweight on health. Similar to the dummy for gender, RR for subjective satisfaction with health is significantly less

than 1 (RR = 0.641), indicating that those with poor subjective health condition tend to be underweight. However, it should be noted here that the actual causal relationship between underweight and health condition is not clear and should be examined using longitudinal data for further analysis.

Estimation results for overweight persons showed that RRs of dummies for gender and age group, eating meals at regular times, and relative living standards are significant. The RR for the dummy for gender was significantly greater than 1 (RR = 2.429), indicating that men were somewhat more likely than women to be overweight. RRs of the age dummy by age group were 2.140 in the 30s group, 3.796 in the 40s group, 4.280 in the 50s group, and 6.546 in the 60s group. Estimates of higher RR values with increasing age indicate a higher probability of being overweight in older age groups than in younger age groups, which is consistent with findings from previous studies (Hu et al., 2002; Su et al., 2017; Zhou et al., 2017). It is also consistent with the Japanese survey results of the National Health and Nutrition Survey in 2016 conducted by the Ministry of Health, Labour and Welfare, in which, except for men in their 60s, the obesity rate is higher in the older age group among men and women in their 20s to 60s. While the basal metabolic rate decreases with the decrease in muscle mass (Shimokata & Kuzuya, 1993), the proportion of overweight or obese people increases with age because of the decrease in the minimum required energy consumption and inadequate physical exercise. While

Table 1
Estimation results by multi-logistic model

	Lean (BMI < 18.5)			Overweight (23.5 ≤ BMI < 27)			Obese (27 ≤ BMI)			Mean	s. d.
	Coefficient	RR	z-value	Coefficient	RR	z-value	Coefficient	RR	z-value		
Dummy for gender (Male = 1, Female = 0)	-1.449	0.235	-3.217	0.888	2.429	4.544	0.583	1.791	2.026	0.495	
Dummy for the age group (in their 20s [reference])											
30s	-0.595	0.552	-1.124	0.761	2.140	2.116	0.228	1.255	0.422	0.246	
40s	-0.933	0.394	-1.611	1.334	3.796	3.662	1.031	2.803	1.814	0.240	
50s	-1.975	0.139	-2.484	1.454	4.280	3.612	1.296	3.656	2.183	0.188	
60s	-1.012	0.364	-1.318	1.879	6.546	4.671	1.679	5.363	2.751	0.107	
Dummy for education level (Junior high school [reference])											
High school	-0.243	0.785	-0.547	0.093	1.097	0.391	-0.165	0.848	-0.488	0.355	
College or higher	-0.426	0.653	-0.905	0.153	1.165	0.546	0.095	1.100	0.207	0.321	
Eating meals at regular times (5-Likart scale)	-0.209	0.812	-0.995	-0.386	0.680	-2.908	0.169	1.184	0.907	3.501	0.027
Length of sleep time (hours)	0.029	1.029	0.099	-0.075	0.928	-0.756	0.101	1.106	0.631	8.671	0.032
Frequency of physical exercise (1-5 scales)	0.011	1.011	0.100	0.004	1.004	0.064	-0.141	0.869	-1.383	2.908	0.053
Stress and depression intensity (4 to 20 points)	0.039	1.040	0.810	0.018	1.019	0.568	0.105	1.111	2.208	11.486	0.116
Subjective satisfaction with health (5-Likart scale)	-0.444	0.641	-2.266	-0.024	0.976	-0.199	-0.171	0.843	-1.060	4.090	0.031
Subjective satisfaction with daily life (5 to 25 points)	0.037	1.037	0.441	0.024	1.024	0.639	-0.178	0.837	-3.005	18.439	0.096
Relative living standards (5-Likart scale)	0.172	1.188	0.822	0.349	1.417	2.700	-0.079	0.924	-0.356	2.952	0.024
Dummy for annual household income (75,000 yuan to less than 100,000 yuan [reference])											
Less than 50,000 yuan	0.597	1.816	0.598	0.146	1.157	0.420	1.743	5.715	3.309	0.093	
50,000 yuan or more but less than 75,000 yuan	1.098	3.000	1.560	0.444	1.558	1.605	0.351	1.420	0.716	0.287	
100,000 yuan or more but less than 125,000 yuan	1.640	5.157	2.250	-0.299	0.742	-0.851	0.986	2.680	1.987	0.204	
125,000 yuan or more	1.308	3.700	1.681	0.431	1.539	1.444	0.980	2.663	2.013	0.234	
Constant	-1.596	0.203	-0.456	-2.295	0.101	-1.567	-2.090	0.124	-0.899		

Note: Authors' estimation. Based on WHO Expert Consultation (2004), we used the following four categories for body weight and BMI: Underweight (BMI < 18.5), normal (18.5 ≤ BMI < 23.5), overweight (23.5 ≤ BMI < 27), and obese (BMI ≥ 27); normal body weight was used as the reference category. It is widely accepted, however, to use a slightly different BMI for these same bodyweight categories: Lean (BMI < 18.5), normal (18.5 ≤ BMI < 25.0), overweight (25.0 ≤ BMI < 30), and obese (BMI ≥ 30).

the value of RR rises by 1.140 (= 2.140 – 1.000) between the 20s and 30s groups, it rises by 1.656 (= 3.796 – 2.140) between the 30s and 40s groups, by 0.484 (= 4.280 – 3.796) between the 40s and 50s groups, and by 2.266 (6.546 – 4.280) between the 50s and 60s groups. Except for the 40s group, the proportion of being overweight increases more rapidly with rising age. Therefore, we should pay attention to the possibility that the proportion of people who are overweight will increase with age. Previous studies (Hu et al., 2002; Ma et al., 2017; Su et al., 2017) had shown that obese Chinese adults were more likely to consume calories and carbohydrates, lipids, and proteins. Considering the evidence that the increase in high-lipid and high-calorie diets is responsible for the increase in lifestyle diseases in China (Du et al., 2004), it is important for the government to further promote awareness-raising programs and activities targeting middle-aged and elderly people to disseminate information on healthy diets and nutritional balance commensurate with their age to prevent noncommunicable or lifestyle diseases.

Because the RR of eating meals at regular times is significantly less than 1 (RR = 0.680), the more irregular the dietary time is, the more likely the individual is to be overweight. In view of the fact that breakfast skipping and disturbed dietary habits in a broader sense induce noncommunicable/lifestyle diseases (Luo et al., 2016; Yang et al., 2015), the importance of regular eating habits, along with the

abovementioned proper energy intake and nutritional balances, should be recognized anew.

The RR of the relative living standards is significantly higher than 1 (RR = 1.417), showing that those who feel their living standards are lower than those of other households living around them tend to be overweight. However, the dummies for annual household income and subjective satisfaction with daily life were not significant. In the rapidly growing Chinese economy, it has been pointed out that there is a tendency for consumers in urban areas to take on conspicuous consumption behavior by the Veblen effect. Those who feel that their standard of living is relatively low may tend to consume high-lipid, high-calorie meat, which is a relatively expensive ingredient with high-income elasticity, as a result of their conspicuous consumption behavior in accordance with the standard of people living around them. In this respect, a more detailed analysis using other data is needed.

In the estimation result of obese persons, the RRs of gender dummy; age dummy in the 50s and 60s groups; stress and depression intensity; subjective satisfaction with daily life; and the dummy for annual household income less than 50,000 yuan, 100,000 yuan or more, and 125,000 yuan or more were significant. The RR of the dummy for gender is greater than 1 (RR = 1.791), and male adults are more likely than female adults to be obese. Similar to the estimation results of overweight persons, the

RR of the age dummy is larger than 1 and is larger as the age group rises. The RRs of the 50s and 60s groups greatly exceeded 1 at 3.656 and 5.363, suggesting the probability that obesity was increased in the 50s and over age group.

The RR of stress and depression intensity was significantly higher than 1 (RR = 1.111) whereas the RR of subjective satisfaction with daily life was significantly lower than 1 (RR = 0.835). This suggests that stress, depression, and dissatisfaction with life may contribute to obesity. Although previous studies in China have not indicated an association between stress, depression, or dissatisfaction with daily life and obesity, stress and depression had been reported to promote obesity through disruption of dietary habits in the USA (Luppino et al., 2010; Scott et al., 2012). To control adult obesity, therefore, it is necessary to strengthen educational activities aimed at improving coping skills for stress/depression and improving the level of satisfaction with life.

As for annual household income, the RR for less than 50,000 yuan is significantly higher than 1 (RR = 5.715), and people in low-income households are more likely to be obese. Furthermore, the RRs for 100,000 yuan to 125,000 yuan (RR = 2.680) and RMB 125,000 or more (RR = 2.663) are significantly higher than 1, suggesting high-income households are also more likely to be obese. Studies using longitudinal data in China have shown that the higher the middle group, the more likely it is to be overweight or obese due to rising incomes (Su et al.,

2015). In a cross-sectional study in China, it was pointed out that, in urban areas, the higher the income group, the more likely eating behavior was unfavorable (Wang et al., 2017), and the more likely it is to be overweight or obese (Hu et al., 2002). On the other hand, Zhou et al. (2017) pointed out that the lower the income group, the more it was overweight and obese. In our study, both low- and high-income groups were more likely to be obese compared with a mid-income group, probably due to unfavorable eating behavior.

It has been pointed out that educational background is associated with eating behavior, overweight, and obesity, such as obesity tendency among persons with higher education (Hu et al., 2002) and disruption of eating behavior among persons with lower education (Chen et al., 2014). However, in this study, education levels were not associated with being lean, overweight, or obese. The association between the length of sleep time (Gong et al., 2017; Su et al., 2015) and lack of exercise (Dong et al., 2017; Hu et al., 2002; Su et al., 2015, 2017; Zhou et al., 2017) and overweight/obesity has also been noted, but this study did not find any significant association. With respect to the frequency of physical exercise, a more overweight or obese person may be exercising to reduce weight, and our cross-sectional analyses may not have adequately ascertained the impact of frequency of physical exercise on overweight and obesity. In the SPEPP, there were no questions about sedentary time or the duration of playing videogames. Therefore, the association

between more detailed lifestyle factors and obesity may need to be considered given the fact that increased sedentary, TV-viewing, or videogame-playing times increase obesity and the risks of future cardiometabolic diseases (Dong et al., 2017; Ye, 2018). A more detailed analysis using longitudinal data remains an issue for further study.

CONCLUSION

This study aimed to examine the factors determining adult overweight or obesity in urban China. The multinomial logistic regression analysis was performed using individual questionnaire data from the SPEPP conducted by Osaka University in six urban cities: Beijing, Shanghai, Guangzhou, Chengdu, Wuhan, and Shenyang. Estimation results from the multinomial logistic model show that 1) women and those who are not in good health tend to be lean; 2) men, middle-aged people, those eating meals irregularly, and those with a lower relative standard of living tend to be overweight; and 3) men, middle-aged people, those with a strong sense of stress and depression, those with a lower level of satisfaction with life, and those with lower or higher annual household incomes tend to be obese.

The results of this analysis suggest a need to further strengthen awareness-raising activities aimed at preventing overweight and obesity in men and middle-aged and elderly people. To do so, it is necessary to strengthen the provision of information on food and health particularly for men and middle-aged people on websites or social network services where information

is frequently collected and, at the same time, to activate food education activities for middle-aged people in the workplace and for elderly people in the community. Furthermore, to not only promote regular dietary habits but also improve living satisfaction and strengthen resistance to stress, it is necessary to provide opportunities to learn about improving coping skills from early on through public relations activities by the government and various educational activities at workplaces and communities as well as through educational opportunities in schools.

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IFRS Adoption on Value-relevance and Risk-relevance of Accounting Information among Indonesian Banks

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ABSTRACT

In 2010, Indonesian banks implemented International Financial Accounting Standards (IFRS) for reporting information about financial instruments. The adoption is hypothesized to make risks more transparent. Its effect on the relevance of accounting information reported by publically traded Indonesian banks from 2007-2013 was investigated. Contrary to our expectations, value-relevance and risk-relevance of accounting information declined after the adoption of IFRS. Findings suggest that IFRS exerts a lesser influence on the relevance of accounting information in developing countries with smaller, less liquid, and weakly enforced capital markets.

Keywords: Accounting information quality, financial instruments, IAS 32, IAS 39, IFRS 7, risk relevance, value relevance

INTRODUCTION

Indonesia adopted International Accounting Standard (IAS) 32 or International Financial Reporting Standard (IFRS) 7 and IAS 39 for financial instruments (collectively,

IFRS-FI to align Indonesian accounting with international standards). The adoption changed the scope, recognition, measurement, presentation, and disclosure of information about financial instruments presented on financial statements. The adoption is expected to increase banking transparency in which financial assets and liabilities dominate its balance sheets. Therefore, comprehensive disclosure of risk exposure and risk management of financial instruments would help stakeholders to understand banks' risk appetites better, thus would improve their monitoring capability.

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Indonesia's banking industry criticized the IFRS adoption for its drawbacks, including costly implementation, negative effect on earnings volatility, less timely determination of loan loss provisions, and high complexity. Some argued that the use of fair value on markets with low capitalization, less liquidity, and weak legal enforcement increase more potential misstatement compared to the use of historical cost.

This research investigates how the adoption of IFRS-FI affects the quality of accounting information reported by Indonesian banks. Increased use of fair value is expected to better reflect the economic value of financial assets and liabilities, thereby improving the relevance of book value. Although compulsory use of fair value would escalate the bank's earnings volatility, yet, the incurred loss model of IAS 39 is capable of limiting earning management which is conducted through manipulation of loan loss provisions. Accordingly, adoption of IFRS-FI is expected to improve the quality of accounting information reported by Indonesian banks.

Using a sample of all publically traded Indonesian commercial banks for 2007-2013, contrary to expectations, this research finds that adopting IFRS-FI have a negative effect on the value-relevance and risk-relevance of financial assets and liabilities reported in financial statements. The relevance of net income and total comprehensive income volatility after implementation of IFRS-FI is also declined. In short, the research shows that adopting IFRS-FI impairs the relevance of book value of a financial asset, financial liabilities,

and income in financial statements. This finding supports the argument that adopting fair value accounting in illiquid and weak legal enforcement has magnified potential for financial misstatement compared to historical costs.

This research establishes new contexts for studying the fair value reporting of financial instruments, namely: the context of the banking industry and the Indonesian context as one of the developing economies. Prior research on fair value accounting practices (Ahmed et al., 2006; Barth et al., 1996; Venkatachalam, 1996; Zhang, 2009) address developed countries, where firms have incentives for transparency, capital markets are active, and legal enforcement is strong. Ali and Hwang (2000) found that in countries with bank-oriented financial systems, accounting information had less relevance than in countries oriented toward capital markets. Fair value accounting raises the potential for misstatements compared to historical cost accounting. Indonesia as one of developing economies has low market capitalization illiquid markets and weak legal enforcement that give management greater opportunity to manipulate the fair value and reduce the reliability of financial asset reporting.

Literature Review

Effect of IAS 32/IFRS 7 and IAS 39.

Adoption of IFRS-FI had a significant effect on Indonesian banks. Three features of IFRS-FI that affect the quality of Indonesian banks' financial statements are discussed follows.

Determining Loan Loss Provisions. Before the adoption, banks calculated loan loss provisions under Regulation of Bank Indonesia. Criteria for determining credit quality and reserves are required for each credit quality classification. In contrast, IAS 39 places more emphasis on the impartial evidence of value declines and on the evaluation of the possibility of decline at balance sheet date. Estimated loan loss provisions are calculated and performed individually and collectively which requires the probability of default data and historical loss of data for at least three years back.

Use of Fair Value Accounting. Changes in Indonesian accounting standards post-IAS 39 led to the increase of fair value application as follows. First, all financial instrument items are measured by initial recognition based on fair value plus transaction cost (except for fair value through profit and loss exclude transaction cost), while in previous SFAS, financial instruments not for trading is measured by acquisition cost. Second, although the financial instruments are not for trading, they are allowed to be measured using fair value at the balance sheet date (fair value option). Third, IAS 39 is more extensive than previous standards, for example, loan that in previous accounting standard is not included in the scope of financial instruments but is included in the current standard.

Financial Instruments and Risks Disclosures. IAS 32 revised IFRS 7 to require more disclosures than previous

Indonesian standards. Under previous standards, information disclosed for each group of securities covers an aggregate of fair value, unrealized gains, and acquisition cost (including unamortized premiums and discounts). IAS 32 revised IFRS 7 requires an entity to disclose a fair value for each group of financial assets and liabilities along with a description of how was fair value was determined. In addition, the current standard requires disclosure of qualitative and quantitative information about the significance of financial instruments to an entity and the nature and extent of their risks. All Indonesian banks had to adopt IAS 32 and IAS 39 completely in 2010.

Empirical Evidence of the Effect of IFRS-FI Adoption and Fair Value Accounting on Financial Statement Quality. Barth (1994a, 1994b), Bernard et al. (1995), and Beatty et al. (1996) found that disclosures under fair value accounting were relevant to investors and reliably reflected in stock prices. Barth et al. (1996) found that estimated fair values of loans, securities, and long-term liabilities were more relevant than historical cost. Landsman (2006) reviewed capital market research in the United States, the United Kingdom, and Australia. He examined the relevance of fair value in accounting and concluded that it (recognition or disclosure) was relevant to investors. However, the magnitude of measurement errors and sources of fair value estimation influenced the degree of relevance.

Prior research also examines the impact of IFRS-FI using data from developed economies. Studies generally find that adopting IAS 39 adds relevance to accounting information (Duh et al., 2012, Fiechter, 2011) and reduces earnings management via loan loss provisions (Leventis et al., 2011). Bonetti et al. (2012) and Gaynor et al. (2011) found that financial instrument disclosures based on IFRS 7 supported users' understanding and interpretation.

Hypotheses Development

The information has value-relevance when it correlates significantly with predicted market values (Barth et al., 2001). If the relationship is significant, then, it is assumed that accounting information is sufficiently relevant and reliable enough to be reflected in the market prices. Application of IAS 39 increases the use of fair value accounting for banks financial assets and liabilities. Theoretically, the use of fair value measurement increases the relevance of financial statements because assets and liabilities in financial statements reflect the economic value at the balance sheet date so that it is highly relevant and useful in decision-making.

Fair value accounting better reflects market conditions, thereby providing more timely information, improving transparency, and facilitating rapid remedial action (Swamy & Vijayalakshmi, 2012). According to Barlev and Haddad (2007), earnings based on historical costs do not reflect earnings quality and are inadequate for investment decisions. Hence, theoretically, the use of

fair value measurement will increase the relevance of financial statements. However, on the other hand, fair value accounting opens the opportunity for management to manipulate the estimated fair value of financial instruments.

Adopting IAS 39 potentially increases the relevance of the financial statement value due to the increased use of fair value measurement on financial assets and liabilities. In addition, a more comprehensive disclosure on IAS 32 on fair value and the risks exposure associated with financial instruments provides more information for investors to assess the company. Duh et al. (2012) and Fietcher (2011) using data from developed country found that the adoption of IAS 39 increased the relevance of accounting information in the bank's financial statement. Based on this argument, the following hypotheses are proposed:

H1a: Adoption of IAS 32 and IAS 39, regarding financial instruments, enhances the value relevance of financial assets

H1b: Adoption of IAS 32 and IAS 39, regarding financial instruments, enhances the value relevance of financial liabilities

As explained above, the application of IAS 39 increases the use of fair value measurements on financial instruments. Fair value measurements generate volatility in accounting information compared to historical cost. Barth (2004) attributed increased volatility due to changes in real economic value, reflected in changes

in the fair value of assets and liabilities. Thus, the application of IAS 32 and IAS 39 increases the volatility of accounting information in banks' financial statements. This volatility, however, represents a change in corporate value and real risk. Papadamou and Tzivinikos (2012) and Duh et al. (2012) found that applying IAS 32 and IAS 39 increased the risk-relevance of earning information in financial statements. This means that financial statements better reflect companies' economic conditions and risks. Accordingly, the following hypotheses are proposed:

H2a: Adoption of IAS 32 and IAS 39, regarding financial instruments, enhances the risk-relevance of net income

H2b: Adoption of IAS 32 and IAS 39, regarding financial instruments, enhances the risk-relevance of comprehensive income

MATERIALS AND METHODS

Data and Sample

The samples used in this research were all listed commercial Indonesian banks with complete financial statements and data required for all variables in our model. From 34 listed bank (for 2013) in Indonesia, 30 banks for 7 years with complete data for all our variables (three years before the adoption of IFRS-FI or 2007-2009 and four years after or 2010-2013) were obtained, resulting 168 bank-years for Value-relevance Model and 633 bank-quarters for Risk-relevance Model. To overcome the effects of outliers,

all variables in all models were winsorized at 1%.

Research Model

Value-Relevance. To examine the value relevance of financial instruments, Song et al. (2010), Khurana and Kim (2003) who adopted Ohlson's (1995) approach were followed. In the equation, 1a stock price (P) is a function of the net book value of equity (Financial Assets, Financial Liabilities, and Non-Financial Net Assets) and future abnormal earnings (AE). Model 1a and 1b test whether IFRS adoption affects the value relevance of financial assets and financial liabilities recognized on the balance sheet.

$$\begin{aligned}
 Pit = & \alpha_0 + \alpha_1FAit + \alpha_2FLit \\
 & + \alpha_3POST * FAit + \alpha_4POST * FLit \\
 & + \alpha_5NetNFAit + \alpha_6AEit \\
 & + \alpha_7NPLit + \epsilon it \quad (1a)
 \end{aligned}$$

Expected result:

H1a: $\alpha_3 > 0$, H1b: $\alpha_4 < 0$

Where,

Pit = Stock price at end of year t

FAit = Book value of financial assets at end of year t

FLit = Book value of financial liabilities at end of year t

POST = Dummy variable for IFRS for the implementation of financial instruments (POST)

NetNFAit = Book value of the net non-financial asset at end of year t

AEit = Future abnormal earnings
 NPLit = Non-performing loans at end of year t

This variable showed the impact of the implementation of IFRS of financial instruments (IAS 32, IAS 39, and IFRS 7). POST would be assigned a value of 1 for samples in the period 2010 -2013 and a value of 0 for the sample in the 2007-2009 period. Consistent with Barth and Clinch (2009), this research scaled all variables by total shares outstanding at year-end t to reduce scale effects in Ohlson's (1995) Model. Financial Assets (FA) and Financial Liabilities recognized in the balance sheet are said to have value relevance if the FA coefficient (α_1) shows a positive sign and the FL coefficient (α_2) shows a negative sign. The implementation of IFRS for financial instruments increased the value relevance of book value of financial assets and financial liabilities when the dummy interaction of POST with FA (α_3) shows a positive sign

and when the dummy interaction variables with FL (α_4) how a negative sign.

Variables based on prior research (Hodder et al., 2006; Khurana & Kim, 2003; Ohlson, 1995; Song et al., 2010) priced by the equity investor were controlled. Based on the residual income model from Ohlson (1995), the book value of net non-financial assets (NetNFA) and future abnormal earnings (AE) was controlled. For the abnormal earnings measurement, Hodder et al. (2006) approach were followed. In addition, bank assets risk (NPL) measured as a bank's non-performing loan divided by total assets (Fonseca & Gonzalez, 2010) was also controlled.

Riedl and Serafim (2011) and Ball et al. (2012) found that categories of financial assets expressed differing degrees of reliability in fair value estimates. Therefore, financial assets per IFRS_FI (IAS 32) were classified to test the relevance of their book values as in Model 1b.

$$\begin{aligned}
 Pit = & \alpha_0 + \alpha_1FVTPLit + \alpha_2AFSit + \alpha_3HTMit + \alpha_4LOANit + \alpha_5KASit \\
 & + \alpha_6FLit + \alpha_7POST * FVTPLit + \alpha_8POST * AFSit + \alpha_9POST * HTMit \\
 & + \alpha_{10}POST * LOANit + \alpha_{11}POST * KASit + \alpha_{12}POST * FLit + \alpha_{13}NetNFAit \\
 & + \alpha_{14}AEit + \alpha_{15}NPLit + \epsilon it
 \end{aligned}
 \tag{1b}$$

where,
 FVTPLit = book value of financial assets classified as fair value through profit or loss as Per IFRS_FI regime or as a sum of trading and derivative assets before the IFRS_FI
 FVTPLit = book value of financial

assets classified as fair value through profit or loss as per regime at end of year t
 AFSit = book value of financial assets classified as available for sale securities as per IFRS_FI regime at end of year t
 HTMit = book value of financial assets

classified as Securities held to maturity as per IFRS_FI regime at end of year t
 LOAN_{it} = book value of financial assets classified as Loan and receivables net as per IFRS_FI regime at end of year t
 KAS_{it} = book value of financial assets classified as Cash and cash equivalents at end of year t

Flit = Book value of financial liabilities at end of year t

POST = Dummy variable for IFRS for the implementation of financial instruments (POST)

Control variables are as defined in model 1a

Risk Relevance of Volatility of Accounting Income (Net Income and Total Comprehensive Income). This research followed measurement of risk-relevance of

Hodder et al. (2006), were to test whether income volatility in financial statement reflected company's risk was conducted by testing the relationship between market-based risk measurement (beta and standard deviation of return) and accounting-income volatility. The volatility of stock return reflects total risk (Hodder et al., 2006) and beta reflects systematic risk. A significant and positive correlation between accounting income volatility and the volatility of stock return and beta (α_1) indicate that income in financial statements reveals the company's risk (risk-relevance). The implementation of IFRS for financial instruments increases the risk relevance of accounting earnings volatility when the dummy interaction of POST with accounting earnings volatility (α_2) shows a positive sign. The model is of risk relevance is presented below:

$$MRISK_{it} = \alpha_0 + \alpha_1Voll_{it} + \alpha_2POST * Voll_{it} + \alpha_3DER_{it} + \alpha_4NPL_{it} + \alpha_5SIZE_{it} + \epsilon_{it} \quad (2)$$

where,

MRISK_{it} = Market risk, measured as stock beta (BETA) and volatility of the stock return (STDDEVRI)

Voll_{it} = Accounting earnings volatility (VOLI) will be tested into 2 types of earnings, namely the volatility of net income (STDEVNI) and the the volatility of total comprehensive earnings (STDEVCI)

POST = Dummy variable for IFRS for the implementation of financial instruments (POST).

DER_{it} = Notional amount of Derivative scale by total assets

NPL_{it} = Non-performing loans

SIZE_{it} = Ln total assets

Following the study of Hodder et al. (2006) income volatility was measured as the standard deviation of quarterly earnings for the 5 quarters calculated as rollover. Model 2 above examines whether two measures of earnings volatility (net income and total comprehensive profit volatility) provide information about bank market risk after controlling for other information about

risks disclosed in the annual report. Then in model 2 follows the research of Hodder et al. (2006), quantitative exposure information available in financial statements, namely the number of notional derivatives and interest rate gaps included as controlling variables. Since the disclosure of interest rate gaps is not mandatory, many sample banks do not disclose this information, thus in this study, we only included notional derivative (DER) as a control variable. In addition, the accounting variables that based on prior-year literature significantly associated with market-based risk measure are controlled (Beaver et al., 1970; Elyasiani & Mansur, 2005; Papadamou & Tzivinikos, 2012;

Salkeld, 2011). These control variables are credit risk measured as non-performing loan (NPL) (Mansur et al., 1993; Elyasiani & Mansur, 2005; Papadamou & Tzivinikos, 2012) and firm size (SIZE) measured as natural logarithm of total assets (Beaver et al., 1970; Papadamou & Tzivinikos, 2012; Salkeld, 2011).

RESULTS AND DISCUSSIONS

Descriptive Statistics

Table 1 presents the descriptive statistic for the Value-relevance Model (Model 1). Stock prices of the sampled companies at end-of-period showed great variation.

Table 1
Descriptive statistics for Value Relevance Model

Variable	Mean	Std. deviation	Min	Max
<i>Dependent Variable</i>				
PRICE (Rp)	1,564.93	2,128.97	28.85	9,600.00
<i>Independent Variables</i>				
FVTPL	189.61	443.84	0.00	2,477.14
AFS	486.56	724.62	0.00	3,495.75
HTM	314.76	560.38	0.00	3,155.02
LOAN	4,560.49	4,741.17	154.32	22,382.83
KAS	126.54	165.87	0.76	816.51
FL	5,519.40	5,498.30	314.52	26,674.60
FA	6,156.38	6,284.54	310.61	30,361.99
<i>Control variables</i>				
AE *	76.60	132.83	-31.31	690.10
NETNFA	636.99	851.19	-163.96	4,315.86
NPL	0.03	0.05	0.00	0.51
<i>Dummy Variable</i>				
POST	POST=0 40.83%	POST= 1 59.17%	POST= 0 69	POST= 1 99

PRICE: Stock price at end of year (December 31); FVTPL: Book value of FVTPL at end of year; AFS: Book value of AFS at end of year; HTM: Book value of HTM at end of year; LOAN: Book value of Loan at end of year; KAS: Book value of cash and cash equivalent at end of year; NETNFA: Book value of non-financial asset (net) at end of year; FL: Book value of financial liabilities at end of year; FA: Book value of Financial Assets at end of year; AE: Unexpected Earning; NPL: bank portfolio risk measure as non-performing loan; POST: Dummy variable for IFRS implementation. *scale by outstanding shares

Assets were mostly loans (receivables), and their average balances at end-of-year were 70.7% of total assets. Average end-of-year balances for investments in securities were 15% of total assets, and most were available for sale (AFS).

Table 2 presents descriptive statistics for the Risk-relevance Model (Model 2). Data were from quarterly reports. Average beta was below 1, meaning the average beta of sampled banks was below the market. Standard deviation in return described historical volatility that was used to assess expected volatility. This measure includes systematic and unsystematic risk (Hutchinson et al., 2015). The volatility of total income far exceeds the volatility of net income. That is acceptable because components of comprehensive income are

influenced by other external factors such as market prices of AFS securities and fixed assets.

Effect of IFRS-FI on Value-Relevance of Financial Assets and Liabilities

Table 3 shows results for Model 1 which test the effects of IFRS adoption on value-relevance of financial assets and liabilities in financial statements of banks in Indonesia. Table 3 Panel A model 1b shows the effect of IFRS_FI implementation to value relevance of financial assets and financial liabilities. Contrary to the expectation, the interaction of the IFRS_FI implementation dummy variable (POST) with FA (α_3) showed a negative sign and the interaction of POST with FL (α_4) showed a positive sign. It indicates the declining value-relevance for

Table 2
Descriptive statistics for Risk Relevance Model

Variable	Mean	Std. deviation	Min	Max
<i>Dependent Variable</i>				
BETA	0.7170	0.4711	0.0000	2.2562
STDDEVRI	0.0610	0.0326	0.0000	0.1819
<i>Independent Variable</i>				
STDDEVNI	0.0016	0.0016	0.0001	0.0062
STDDEVCI	0.0048	0.0058	0.0002	0.0195
<i>Control Variable</i>				
NPL	0.0314	0.0248	0.0000	0.1187
DER	0.0421	0.1072	0.0000	0.8709
SIZE (IDR Million)	84,722,014	111,956,336	900,000	390,000,000
SIZE (ln)	30.5567	1.8238	26.7635	33.5972
	Number		Percentage	
<i>Dummy Variable</i>	POST=1	POST=0	POST=1	POST=0
POST	400	296	57.47%	42.53%

BETA: Market Risk Stock Beta; STDDEVRI: Standard deviation of stock return; STDDEVNI: Standard deviation of net income; STDDEVCI: Standard deviation of comprehensive income; NPL: bank portfolio risk measure as non-performing loan; DER: derivative notional amount; SIZE: Bank size in Rp'mio; SIZE: Bank size_Ln total asset; POST: Dummy variables of IFRS for financial instrument implementation

Table 3
Result effect of IFRS for financial instruments implementation on the value relevance of financial assets and financial liabilities

	Hypothesis	Model 1a		Model 1b			
		Coef.	Prob.	Coef.	Prob.		
Panel A							
<i>FA</i>	+	0.3293	0.125	1.8634	0.003	***	
<i>FL</i>	-	-0.2972	0.171	-1.9814	0.004	***	
<i>FA*POST</i>	H1a : +			-1.4313	0.006	***	
<i>FL*POST</i>	H1b : -			1.5529	0.007	***	
<i>NETNEA</i>	+	0.3595	0.160	0.3912	0.143		
<i>AE</i>	+	9.6227	0.000	***	10.0824	0.000	***
<i>NPL</i>	+	1664.9160	0.063	*	1272.2730	0.118	
<i>CONS</i>		2181.2870	0.083		-10477.6800	0.005	
N		168		168			
Prob (Wald-stat) R ²		0.0000 0.7050		0.0000 0.7131			
Panel B							
		Model 1c		Model 1d			
<i>FVTPL</i>	+	-0.149	0.651	1.811	0.012	**	
<i>AFS</i>	+	0.929	0.005	***	2.205	0.001	***
<i>HTM</i>	+	0.515	0.156	1.973	0.002	***	
<i>LOAN</i>	+	0.289	0.302	2.037	0.003	***	
<i>KAS</i>	+	-2.458	0.015	**	-3.074	0.015	**
<i>FL</i>	-	-0.279	0.374	-2.016	0.004	***	
<i>FVTPL*POST</i>	H1a : +			-1.637	0.019	**	
<i>AFS*POST</i>	H1a : +			-0.932	0.084	*	
<i>HTM*POST</i>	H1a : +			-1.139	0.060	*	
<i>LOAN*POST</i>	H1a : +			-1.742	0.005	***	
<i>KAS*POST</i>	H1a : +			0.356	0.424		
<i>FL*POST</i>	H1b : -			1.712	0.008	***	
<i>NETNEA</i>	+	0.515	0.135	0.745	0.024	**	
<i>AE</i>	+	11.464	0.000	***	12.036	0.000	***
<i>NPL</i>	+	1,226.880	0.207	611.725	0.280		
<i>CONS</i>		-1420.365	0.402	-11261.95	0.007		
N		168		168			
Prob (Wald-stat) R ²		0.0000 0.780		0.0000 0.7974			

PRICE: Stock price at end of year (December 31); FVTPL: Book value of FVTPL at end of year; AFS: Book value of AFS at end of year; HTM: Book value of HTM at end of year; LOAN: Book value of Loan at end of year; KAS: Book value of cash and cash equivalent at end of year; NETNEA: Book value of non-financial asset (net) at end of year; FL: Book value of financial liabilities at end of year; FA: Book value of Financial Assets at end of year; AE: Unexpected Earning; NPL: bank portfolio risk measure as non-performing loan; POST: Dummy variable for IFRS implementation. *scale by outstanding shares

both a financial asset and financial liabilities after the adoption of IFRS-FI. Based on Table 3 panel B model 1d the result of the interaction of implementation variable (POST) with each group of financial assets (FVTPL, AFS, LOAN, and KAS) shows that the decline occurs among all groups of financial assets except cash and cash equivalents. The greatest decline in value-relevance occurs in loans and receivables and FVTPL.

The significant declined in value relevance of financial assets especially FVTPL classification and financial liabilities may be due to IFRS_FI increases the use of fair value for financial assets and liabilities (for instance the fair value option). The fair value measurement improves the relevance of accounting information to investors. However, internal valuation provides incentives and opportunity for managers to manipulate the estimated fair values when securities markets are illiquid and inactive. Information asymmetry between managers and outsiders regarding input values should be included in the estimation model or the actual economic value of assets or liabilities can cause moral hazard and adverse selection (Landsman, 2007). Difficulties in estimating fair value also occur in compound financial instruments such as a convertible bond or callable bond which value depends on the value of the conversion feature or the value of the call feature. So that there is an issue that estimating the fair value of instruments is sensitive to whether the actual market price information from other instruments in the

entity's balance sheets is available to be used as input models (Landsman, 2006). Untoro (2012) found that in Indonesia, banks smoothed income by manipulating fair values during the initial application of IAS 39. The study of Barth et al. (1996) found that the estimation model used to assess the total bond value might lack reliability. Landsman (2006) showed that the relevance of fair value information was influenced by the magnitude of measurement errors and the source of estimations.

The greatest decline in value relevance occurs in loan and receivables as shown in Table 3 panel B (model 1d). This significant decrease maybe because of the calculation of allowances for impairment losses on loans based on IFRS_FI (IAS 39) using the incurred loss model. Incurred loss model potentially reduces earnings management through loan loss provision due to its objectivity. However, this method delays the recognition of losses (Barth & Landsman, 2010). Thus, the method of incurred loss model limits banks to accommodate managers' efficient motive to use private information for subjective and judgmental credit risk assessment (Leventis et al., 2011). This causes banks to be unable to fully determine loan loss provisions that capture full credit risk so that net loan figures do not reflect the real values of loan. Gebhardt and Farkas (2011) using data from banks in the European Union found that after the implementation of IFRS there was a decrease in the timeliness of the recognition of a provision for a decrease in credit value. Other possible explanation may be due to the user of financial statement

no longer use the information of loan and receivables in the balance sheet which recorded using amortized cost. Instead, they use the fair value of the loan and receivable disclosed in the notes to financial statements. Under IFRS-FI (IAS 32/IFRS 7) banks must disclose the fair value of all classes of financial assets and liabilities. Other disclosures required are fair value hierarchy based on the reliability of input used to measure fair value.

Effect of IFRS-FI Adoption on Risk-Relevance of Income Volatility

Table 4 shows the effect of IFRS-FI on risk-relevance of accounting income volatility to total risk in financial statements of banks in Indonesia. The interaction of POST with accounting income volatility (STDEVNI and STDEVCI) show a negative sign. It indicates the decline in the risk-relevance of accounting income volatility to total risk after the adoption of IFRS-FI. When associated with the results of testing hypotheses 1a and 1b (relevance of book values), the results of testing hypotheses 2a and 2b (total risk relevance) find consistent results. The test results show a decline in the relevance of the book value of financial assets/liabilities and the relevance of risk (total risk) accounting income after the implementation of IFRS-FI. The implementation of IFRS-IK increases the volatility of accounting earnings because of the increased usage of fair value. The increase in the volatility of earnings according to Barth (2004) can be caused by three things, namely: (1) changes in the

actual economic value which is reflected in changes in the fair value of assets and liabilities; (2) volatility arises because of measurement errors in estimating changes in fair value; and (3) volatility arises because the use of a mixed attribute model can be reduced if all instruments are measured using fair value or if the company uses fair value options. Based on the findings in Table 3 and Table 4, it can be concluded that the increase in earnings volatility is caused by the second factor that may be most acceptable because if earnings volatility is caused by the first factor, there should be an increase in value relevance of book value of financial assets/liabilities and risk relevance of net income and total comprehensive income. In addition, as previously explained, the limitations of the incurred loss model in the loan loss provisions setting causes the loan loss provision not timely so that accounting earnings do not reflect the real situation (Barth & Landsman, 2010). Consequently, the limitations of the incurred loss model and errors or manipulation of fair value measurement of financial assets and liabilities might hinder the capability of income volatility to be reflected in the actual total risk of the bank.

Table 5 shows risk-relevance of accounting income to systematic risk (beta) in financial statements of banks in Indonesia. Contrary to the results presented in Table 4, Table 5 shows the interaction of POST with total comprehensive income volatility (STDEVCI) shows positive sign. It indicates an increase of risk-relevance of total comprehensive income (STDEVCI)

Table 4
Result effect of IFRS for financial instruments implementation on risk relevance of income (total risk)

Hypothesis	Dependent Variable: STDDEVRI								
	Model 2a		Model 2b		Model 2c		Model 2d		
	Coef.	Prob.	Coef.	Prob.	Coef.	Prob.	Coef.	Prob.	
STDEVNI +	-0.602	0.271	3.344	0.009					
STDEVNI*POST H2a: +			-4.625	0.000	0.710	0.002	1.313	0.000	***
STDEVCI +				***			-1.359	0.000	***
STDEVCI*POST H2b: +					0.180	0.006	0.162	0.000	***
NPL +	0.215	0.002	0.166	0.013	0.180	0.006	0.162	0.000	***
DER +	0.000	0.494	-0.012	0.202	0.001	0.463	0.008	0.289	
SIZE +/-	-0.005	0.003	-0.0025	0.076	-0.003	0.035	-0.002	0.107	
CONS +	0.056	0.000	0.0565	0.000	0.053	0.000	0.054	0.000	
N	633		633		633		633		
Prob R ²	0.0000 0.0271		0.0000 0.0494		0.0000 0.0684		0.0000 0.0962		

BETA: Market Risk Stock Beta; STDDEVRI: Standard deviation of stock return; STDDEVNI: Standard deviation of net income; STDDEVCI: Standard deviation of total comprehensive income; STDEVNI*POST and STDEVCI*POST: the interaction of POST with accounting income volatility (STDEVNI and STDEVCI); NPL: bank portfolio risk measure as non-performing loan; DER: derivative notional amount; SIZE: Bank size in Rp'mio; POST: Bank size_Ln total asset; POST: Dummy variables of IFRS for financial instrument implementation.

to systematic risk post-IFRS FI. Contrary to the results presented in Table 4, Table 5 shows an increase in systematic risk relevance (beta) of total comprehensive income after the application of IFRS-FI. This may occur due to an increase in market risk disclosures (for instance interest rate and exchange rate risk) based on IFRS-FI helping financial statement users to interpret the bank's systematic risk. IFRS-FI requires qualitative and quantitative disclosures of market risks such as disclosures of earnings sensitivity on changes in market risk such as changes in interest rates and exchange rates. Disclosure of market risk related to financial instruments is regulated by IFRS-FI in sufficient detail to make it easier for users of financial statements to assess a bank's systematic risk. The increase in this disclosure has led to an increase in the monitoring capability of bank stakeholders in relation to market risk, thereby minimizing the opportunity to manipulate (opportunistic actions) on accounts that are affected by market risk and as a result of total comprehensive income volatility more closely reflecting actual market risk.

The results in Table 4 shows that after the implementation of IFRS-IK there was a decrease in the risk relevance of net income and total comprehensive income to total risk. On the contrary, the results in Table 5 show that after the implementation of IFRS-IK there was an increase in the risk relevance of total comprehensive profit to market risk (beta). Total risk consists

of market risk (systematic) and bank-specific risk (non-systematic risk). This opposite result could be caused by the lack of disclosure requirement for bank operational risk under IFRS-FI compare to the requirement of market risk disclosures which are quite detailed both for qualitative disclosures and quantitative disclosures. The comprehensive disclosures of operational risks especially quantitative disclosures will provide information about bank-specific risks. In addition, naturally, banks tend to refuse to disclose bank-specific risks (non-systematic) because they can reduce bank competitiveness (bank competitive advantage), this is different from market (systematic) risk, where information is easier to obtain (public information). The lack of disclosures regarding bank-specific risks causes the market unable to properly assess bank-specific risks compared to market risk. Other alternative explanation for this result may be due to equity investors' behaviour in normal conditions pay more attention to market risk than to firm-specific risk.

Additional Test

This research considered how the 2008 economic crisis might have affected the stock prices of Indonesian banks under IFRS. Hence, Models 1a and 1b were further tested by excluding 2008 samples. Results are consistent with the results of primary testing, which suggested that the value relevance of financial asset and liabilities were declined.

CONCLUSION

This research had investigated the effect of IFRS-FI on the value- and risk-relevance of information in financial statements of Indonesian banks. The results showed a decrease in value-relevance of financial assets and liabilities in the balance sheet of banks in Indonesia. Consistent with this finding, risk-relevance of income to total risk post-IFRS also declined. This result may reflect error or manipulation of fair value estimations and limitations of the incurred loss model. Another explanation is that investors use more information about fair value and risk from notes to financial statements compared to the use of financial statements. These findings suggest that IFRS-FI may exert the unique effects in countries with smaller, illiquid, or weak enforcement capital markets.

Limitations

This research warrants several caveats. First, the sample is limited to banks, and the result might not generalize to non-banking. First, the sample is limited to banks, and the result might not generalize to non-banking. Further research needs to investigate the effect of IFRS-FI on the relevance of accounting information by using non-banking companies as samples. Second, the research only tests the effect of adopting IFRS-FI on the relevance of accounting information in the balance sheet and income statement. Further research needs to investigate the effect of IFRS-FI

from reliability dimension. Third, the sample for the value-relevance model is small due to data availability and only covers listed banks in Indonesia. Further studies need to use larger samples over longer periods and include other developing countries.

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Tax Avoidance and Cost of Debt: Ownership Structure and Corporate Governance

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ABSTRACT

This study examines the relationship between tax avoidance actions and the cost of debt capital through the moderating effects of corporate governance (family ownership, the ultimate owner, the second-largest shareholder, and the effectiveness of the board, and audit committee) for companies on the Indonesian Stock Exchange between 2008-2012. Using the methodology of panel data, the results show that tax avoidance has a positive relationship with the cost of debt capital. Furthermore, it is found that concentrated ownership strengthens the relationship between tax avoidance and the cost of debt, while the existence of second-largest owners weakens the relationship. Even though this study cannot prove that family ownership and the effectiveness of the company's board commissioners and audit committee have any impact on the tax avoidance and cost of debt relationship, it provides future research with a better insight into the role of a company's

shareholders on its tax compliance. This study is one of the first that questions the role of a firm's ultimate shareholder and its second-largest shareholder based on the relationship between tax avoidance and the cost of debt.

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INTRODUCTION

People, as well as companies, tend to avoid tax. Avoiding tax has been regarded as a way to gain extra cash out of the company's earnings. However, researches have been conducted on the consequences of tax avoidance actions undertaken by corporations. This research follows the work of Lim (2011) in examining company tax avoidance behaviour with reference to its cost of debt. The agency theory mentions that there will be an agency problem on tax avoidance through information asymmetry, as suggested by Lim (2011). This theory will be the grand theory for this paper. The following middle-range theory argues that this implication is moderated with the presence of adequate monitoring agents that is the role of institutional owners. This study also evaluates whether the effectiveness of the corporate board and audit committee also moderates the relationship between tax avoidance and cost of debt.

The first objective of the study is to examine the relationship between tax avoidance and cost of debt. The second one is to probe the role of the ultimate owner, second largest owner, and family owner and the effectiveness of the board and the audit committee in moderating the effect of tax avoidance on the cost of debt. Tax avoidance may benefit the companies due to lower cost of capital and at the same time possibly allow companies to bear a higher cost of capital (Dhaliwal et al., 2008; Graham & Tucker, 2006; Lim, 2011). Tax avoidance decisions, like other management

decisions, can be efficient for the company, for example, the substitution effect on the use of debt through interest expense as an income tax deduction (Graham & Tucker, 2006; Lim, 2011).

On the other hand, such decisions can also be opportunistic which is with the occurrence of rent diversion, which according to Jensen and Meckling (1976) is a management behaviour that seeks personal gain, and therefore needs to be attended to with caution as it may harm shareholders' and other stakeholders' interests. This can create another problem which is a decrease in corporate transparency (Desai & Dharmapala, 2009; Desai et al., 2007; Desai & Dharmapala, 2006). Companies that carry out tax avoidance face an increasing information risk that must be borne by the shareholders, causing a higher expected rate of return for company shareholders, and resulting in a higher cost of equity capital for the company (Dhaliwal et al., 2008).

Moreover, Desai and Dharmapala (2006) had also found that companies that reported their taxes aggressively, implying a concomitant low degree of corporate transparency, also tended to carry out earnings management in the form of earnings aggressiveness (Frank et al., 2009) and had less persistent earnings (Tang & Firth, 2012) thus lowering the earnings' quality. They further argued that tax management indicated earning management and was able to determine the earning persistence. Dhaliwal et al. (2008) further demonstrated the relationship between tax management

and the quality of earning that mostly increased the informational risk generated by the company.

This study also probes the role of the corporate governance (CG), family-owned and shareholding, in moderating the positive relationship between tax avoidance and cost of debt (Desai & Dharmapala, 2009, 2006; Lim, 2011). Previous studies regarding the role of corporate governance and ownership structure (Desai & Dharmapala, 2006; Lim, 2011; Wahab & Holland, 2012) are mostly conducted in developed countries, with different characteristics of corporate governance. In developing countries, it is common to find both concentrated and pyramidal family ownership structures (Diyanty, 2012; Fan & Wong, 2002; LaPorta et al., 1999); and thus, the controlling shareholders possess strong roles in their companies and have the potential to act against the interests of the minority shareholders. This study particularly evaluates the role of the controlling shareholder, both family-owned and non-family owned, as well as the second-largest shareholder (Attig et al., 2008) in moderating the positive effects of tax avoidance on the cost of debt.

The final purpose of this study is to evaluate whether the board of commissioners and the audit committee are able to affect the lenders' perception of the company's tax avoidance practices through the company's cost of debt. This study found that tax avoidance heightened the company's cost of debt. This positive relationship is found more prominently

in more concentrated companies and less strongly when the company has the second-largest shareholder as a monitoring agent. However, the supposed role of family ownership and effectiveness of the board of commissioners and audit committee in moderating the positive relationship between the tax avoidance activities and the company's cost of debt tested in this study were not proven.

This result, as concluded by this research, provides a number of contributions in several aspects. First, to the best of our knowledge, this research is the first that probes the role of controlling owners, second-largest shareholder, and family ownership structures on the relationship between the tax avoidance and the cost of debt. The second contribution is the use of a sample of companies as listed in the Indonesian capital market (IDX). This fact is important as the Indonesian market has distinctive characteristics, which are first, a capital market which currently is in its emerging state with limited means on minority stakeholders' protection. Second, corporations in Indonesia tend to be owned by certain concentrated owners (family), which would increase the possibility of any entrenchment act undertaken by the controlling owners to the minorities. Third, investigating the effect of tax avoidance particularly on the cost of debt in the Indonesian market is interesting as it is found that corporations in Indonesia prefer taking debt from banks as compared to issuing equities due to information transparency requirements attached to the latter choice

(Leuz & Oberholzer-Gee, 2003). Choosing debt as the financing strategy limits the company's obligation to disclose necessary information to only those parties involved in the debt agreement which is banks and other lenders. Adopting pecking order theory, Adiputro (2015) also found that companies in Indonesia, especially after the 2008 financial crisis, preferred to obtain loans from banks as the last option of equity issuance.

The remainder of this paper is organized into four sections. Section 2 covers hypotheses development. Section 3 outlines the sample, designates the empirical model and defines the variables. Section 4 covers analysis of the statistical and empirical evidence, including the sensitivity analysis. Finally, Section 5 provides the conclusion.

Hypotheses Development

Some studies examined the relationship between BTD (Book-Tax Differences) as a proxy for tax avoidance and the cost of debt and found a substitution effect on the use of debt as a source of funding (Graham & Tucker, 2006; Lim, 2010). Graham and Tucker (2006) found that companies that carried out tax sheltering appeared to have lower borrowing costs in comparison to those that did not.

On the other hand, Bhojraj & Sengupta (2003) and Derriena et al. (2016) argued that an increase in information asymmetry caused an increase in both expected and actual losses to debtholders, causing increased cost of debt. The first hypothesis (H1) in this study then is as follows:

H1: Tax avoidance increases the company's cost of debt

Fan and Wong (2002) suggested that a (group of) controlling shareholder(s) tended to have greater control than the number of shares owned, thus allowing the ultimate owner to determine the company's financial and operating policies. This leads to the occurrence of the entrenchment effect, i.e. the ability of the controlling shareholder that holds more control rights than cash flow rights to control the company opportunistically, a situation which can thus harm the minority shareholders' interests (Fan & Wong, 2002). Following is the second hypothesis (H2):

H2: The increase in the cost of debt due to tax avoidance will be heightened in companies in which ultimate owners hold a higher ratio of control rights to cash flow rights

Companies with family ownership are deemed to have higher financial profitability as compared to other companies, especially if the family owners are actively involved in the company's management (Maury, 2006). This is because the owners want to perpetuate the company's glory. Further, Chen et al. (2010) indicated that family companies tended to not be tax aggressive. In addition, family firms tend to maintain their reputation and relationship with the authorities in order to ensure the survival of the family business in the long run.

Nevertheless, family ownership, which usually is accompanied by the pyramidal ownership structure (Claessens & Yutroglu, 2013) can also carry the risk for minority shareholders exclusively for the sake of the company's ultimate owner's personal gains, including in Indonesia (Diyanty, 2012).

In short, family-controlled companies that avoid tax may, on one hand, be perceived by lenders as being careful not to jeopardize their reputations, and on the other hand, are viewed as efficient management discretion instead of opportunistic, hence, the third hypothesis (H3):

H3: The effect of tax avoidance on the cost of debt in family-controlled companies is different from non-family-controlled companies

Attig et al. (2008) found that the role of the second-largest shareholder reduced agency conflicts and information asymmetry between an ultimate owner and other minority shareholders, in particular, for companies in developing countries as compared to companies in developed countries. This is due to the weak institutional environment (protection of shareholders and law enforcement) in developing countries (Attig et al., 2008).

On the other hand, the second-largest shareholder can weaken the agency conflicts between ultimate owner and minority shareholders as second-largest shareholder appears to have interests that are in line with the interests of the management (and ultimate owner), which are different from the

common interests of minority shareholders (Kim et al., 2007). The fourth hypothesis (H4) is as follows:

H4: The increase in the cost of debt due to tax avoidance will be different in companies with a second-largest shareholder

Previous studies show that companies with good corporate governance will be able to suppress the management's tendency to do rent diversion and tax evasion measures (Desai & Dharmapala, 2006). They were also able to moderate the relationship between tax planning and company value (Desai & Dharmapala, 2009). Based on the arguments above, the fifth hypothesis (H5) is as follows:

H5: The increase in the cost of debt due to tax avoidance will be lowered in companies with the stronger corporate governance mechanism

MATERIALS AND METHODS

Sample Selection

The sample chosen for this study comprised all the companies listed on the Indonesia Stock Exchange from 2008 to 2012. These samples had been selected using purposive sampling method with the criteria that during the observation period the companies: (i) have complete data of, both, financial and ownership structure, (ii) did not have negative equity, (iii) were not involved in any form of mergers, acquisitions, and divestitures. Companies that were specifically regulated in the tax regulations were excluded: (i) subject to final income

tax (referred to as Article 4 (2) income tax act), that are construction service business, real estate, and land and/or building rental, (ii) allowed to form tax provisions and to nurture a reserve fund (Article 9 (1) income tax act).

Variables Definition

Cost of debt was calculated, according to the method suggested by Lim (2011), by dividing the company's interest expense by the year's average corporate interest-bearing debt, where the average corporate interest-bearing debt was obtained from total current year's interest-bearing debt (short-term and long-term) added to the one from the previous year which was then divided by two. This calculation of interests, which only includes the interest-bearing debt (and not the operational liabilities) is in accordance with the managerial balance sheet approach.

According to Sengupta (1998), the cost of debt used in this study is for the year $t + 1$. The ultimate owner is proxied as the ratio of the degree of the ultimate owner's control rights to its cashflow rights is called its Cash-Flow Leverage. Family shareholders are the firm's ultimate owner which is individual or a group of individuals who constitute a family. Following the study of Diyanty (2012), the identity of an ultimate owner is determined whether it is an individual or a group of individuals who have family ties. Family, in this study, is a dummy variable, which is given the value of 1 if the ultimate owner (with minimum 20% ownership) is an

individual name within a family or group of families and 0 if it is not so.

The second-largest shareholder takes into account the presence of any other large shareholder, other than the ultimate owner. Following the work of Attig et al. (2008), the second-largest shareholder's role will be measured using the dummy variable, 1, if the company has a second-largest shareholder (who holds more than 20% shares), and 0 if it does not.

Corporate governance variable represents the effectiveness of the board of commissioners and audit committee in a company. In this study, the score has been calculated representing the monitoring effectiveness of the company's board commissioners and audit committee (Klein, 2002). According to Hermawan (2009), this study uses a similar checklist to assess the characteristics of the board commissioner and audit committee. Each question in the checklist has three possible answers which are good, fair, and poor, which represents a score of 3, 2, and 1, respectively, on the independence, activities, size, expertise, and competence of the boards and the audit committee. The above-mentioned checklist suggests that lenders will perceive companies with higher corporate governance score to have better monitoring tools.

Previous studies indicate that the difference between accounting profit and taxable profit, or the book-tax difference not only imply the presence of tax avoidance but also of earnings management (Tang & Firth, 2012) and earnings aggressiveness behaviours. Moreover, research also finds that

tax avoidance would reduce the transparency of firms (Desai & Dharmapala, 2006) which in turn would increase the investors' information risks with a higher opportunity of rent extractions by management creating a shield for managerial opportunism (Desai & Dharmapala, 2009; Wilson, 2009). To acknowledge the existence of earnings aggressiveness and low transparency, due to tax avoidance actions, this research uses Earnings Quality variable as a control variable. Earnings quality is a combined measure of discretionary accruals (DA) and earnings transparency (ET) using confirmatory factor analysis (CFA).

Other control variables employed in this study include financial leverage, growth rate, the value of the company, size, and age of the company. Control variables further include a ratio of return on asset (ROA), cash flow from operations (CFO) and interest rate over the debt. While Dechow et al. (1996) argued that higher financial leverage represents higher outstanding debt which could lead to higher risk and higher cost of capital, Siregar (2005) found that high growth rate of the company was expected to accompany high discretionary accruals.

Nelson et al. (2002) affirmed that higher market to book value or smaller companies indicated lower earnings management. However, older companies avoid poor earnings quality in order to maintain their reputation and hence get a better interest rate from lenders (Lim, 2011). Some studies further argue that the higher the profitability, the higher is the earnings quality (Francis

et al., 2005) and the lower the need for a loan (Petersen & Rajan, 1994). On the other hand, Francis et al. (2004) claim that the higher the interest coverage, the higher is the degree of trust the lenders have and lesser is the cost of debt.

Research Model

To answer the first objective of this study, which was to find the relationship between tax avoidance and cost of debt, hypothesis H1 was tested by using the following model with the cost of debt as the dependent variable and tax avoidance as the independent variable. The earnings quality variable in this research was one with the influence of tax avoidance.

The first hypothesis, H1, then, was tested by using model (2) as follows:

$$\text{COD}_{it+1} = \gamma_0 + \gamma_1 \text{ABTD}_{it} + \gamma_2 \text{pEQ}_{it} + \gamma_3 \text{Growth}_{it} + \gamma_4 \text{Age}_{it} + \gamma_5 \text{Lev}_{it} + \gamma_6 \text{CFO}_{it} + \gamma_7 \text{Size}_{it} + \gamma_8 \text{Intcov}_{it} + \gamma_9 \text{ROA}_{it} + \epsilon_{it} \quad (1)$$

Where,

COD_{it+1} = cost of debt;

Lev_{it} = total debt to total equity;

CFO_{it} = cash flow from operation;

Size_{it} = natural logarithm of total assets;

Intcov_{it} = ratio of operating income to interest expense.

Hypotheses 2, 3, 4, and 5 were developed for answering the second objective of this research, which was the impact of moderating variables (the ownership structure and corporate governance). They

were tested by using the following research model:

$$\begin{aligned} \text{COD}_{it+1} = & c_0 + c_1\text{ABTD}_{it} + c_2\text{pEQ}_{it} \\ & + c_3\text{Growth}_{it} + c_4\text{Age}_{it} + c_5\text{Lev}_{it} + \\ & c_6\text{CFO}_{it} + c_7\text{Size}_{it} + c_8\text{intcov}_{it} + c_9\text{ROA}_{it} + \\ & c_{10}\text{Fam}_{it} + c_{11}\text{Fam}*\text{ABTD}_{it} + c_{12}\text{CFL}_{it} + \\ & c_{13}\text{CFL}*\text{ABTD}_{it} + c_{14}\text{OWN2}_{it} + c_{15}\text{OWN2}_{it} \\ & *\text{ABTD}_{it} + c_{16}\text{CG}_{it} + c_{17}\text{CG}*\text{ABTD}_{it} + \\ & \varepsilon_{it} \quad (2) \end{aligned}$$

Where,

FAM_{it} = 1 if the firm's ultimate owner is an individual or group of individuals in a family and 0 if otherwise;

CFL_{it} = the ratio of ultimate owner's control rights to cash flow rights; OWN2_{it} : 1 if the firm has a SLS, and 1 if otherwise;

CG_{it} = corporate governance score.

From the equation, the expected sign for the coefficients are as follows: c_{11} and $c_{15} \neq 0$; $c_{13} > 0$; and $c_{17} < 0$

RESULTS AND DISCUSSIONS

Statistical and Empirical Evidence

Cash flow leverage, which represents the ratio of the ultimate owner's control rights to the ultimate owner's cash-flow rights, has a minimum (maximum) value of cash flow leverage is 1 (2.03). The higher the control rights owned by the ultimate owner as compared to their cashflow rights are, the more open the ultimate owner to the conflict of interest will be, leading to a higher possibility of entrenchment problems.

Family ownership (FAM), which is

a dummy variable, has an average and median value of this variable is 0.7 and 1, respectively. These numbers indicate that there are more of family-owned companies compared to non-family owned included in the sample. The average value of variable OWN2, which represents the second-largest shareholder, of 0.29 and the median value of 0 indicates that there are more companies in the sample that do not have a second-largest shareholder as compared to those who have.

The Effect of Tax Avoidance on the Cost of Debt Capital

Univariate analysis among each of the variables used in this study shows that the tax avoidance variable has a positive and significant correlation with the cost of debt. This positive and significant correlation is an early indication that tax avoidance affects the cost of debt. Moreover, it can be deduced from the analysis that all interacting variables between the moderating variables and the tax avoidance variable in this research show a positive correlation with the cost of debt capital variable, except for the family ownership and second-largest shareholder variables.

Table 1 shows the multivariate analysis of the study. The first hypothesis (H1) states that tax avoidance has a positive relationship with the cost of debt capital. The tax avoidance can increase the corporate's information asymmetry, which can result in the occurrence of opportunistic management behaviour as well as the diversion of rents (Desai et al., 2007; Desai & Dharmapala, 2006; Wilson, 2009). Tax avoidance can cause agency problems

between the management and lenders and other problems related to moral hazard (Lim, 2011). Therefore, lenders facing such high risk will tend to protect themselves by charging a higher cost of debt to the company.

A significant positive value found in the ABTD variable in Table 1 indicates that companies undertaking tax avoidance face a higher cost of debt as compared to other companies. This result supports H1.

The Effect of Ownership Structure and Corporate Governance on the Positive Impact of Tax Avoidance on Cost of Debt

Four moderating factors are tested on their role in strengthening or weakening the positive effect of tax avoidance on the cost of debt capital. The four factors are the ultimate owners' cash flow leverage, family owners, second-largest shareholders and corporate

governance score. The result in Table 1 is consistent with the second hypothesis (H2) which predicts that cash flow leverage positively influences the impact of tax avoidance on the cost of debt. Higher cash flow leverage in companies carrying out tax avoidance will impact on the higher cost of debt. Ultimate owner is found to be perceived by the lenders as a reason for potential entrenchment problems. A higher ultimate owner implies higher uncertainty in the eyes of the lenders. Lenders perceive that the tax avoidance actions taken by higher ultimate owner's cash flow leverage companies tend to be opportunistic, hence charge higher interest.

Family ownership is expected to have an influence, be it positive or negative, on the relationship between tax avoidance and the cost of debt (H3). The result in Table 1, however, is inconsistent with the

Table 1
Effect of tax avoidance of the Cost of Debt (Model 1 and Model 2)

Variable	Predicted Sign	Model 1 (No Moderation)			Model 2 (With Moderation)		
		Coef.	p-value		Coef.	p-value	
C		0.219	0.000	***	0.163	0.000	***
ABTD	+	2.760	0.001	***	2.296	64	*
pEQ	-	5.790	0.003	***	5.86	0.003	***
GROWTH		0.157	0.007	***	0.156	0.007	***
AGE	-	0.002	0.180		.001	.0241	
LEV	+	-0.158	0.000	***	-0.158	0.001	***
CFO	-	-0.156	0.016	**	-0.155	0.000	***
SIZE	-	-0.03	0.002	***	-0.147	0.022	**
INTCOV	-	0.000	0.457		1.092	0.003	***
ROA	-	1.358	0.001	**	1.377	0.001	***

Table 1 (Continued)

Variable	Predicted Sign	Model 1 (No Moderation)		Model 2 (With Moderation)		
		Coef.	p-value	Coef.	p-value	
FAM	+/-			-0.003	0.455	
FAM*ABTD	+/-			-0.269	0.414	
CFL	+			0.006	0.443	
CFL*ABTD	+			0.881	0.074	*
OWN2	+/-			-0.009	0.365	
OWN2*ABTD	+/-			-0.636	0.054	*
CG	-			0.076	0.249	
CG*ABTD	-			-0.182	0.448	
Adj R-squared		17.50%	17.82%			
Prob F-stat		0	0			

Notes: ***significant at 1%; **significant at 5%; *significant at 10%

COD: the cost of debt; ABTD: Abnormal Book-Tax Difference; pEQ the fitted value of earnings quality drew from model (1); Growth: sales growth; Lev: total debt to total equity; *Size*: the natural logarithm of total assets; MTBV: market-to-book value of equity; CFO: Cash Flow from operations; Intcov: ratio of operating income to interest expense; ROA: return on asset; Fam: 1 if the firm's ultimate owner is an individual or group of individuals in a family, and 0 if otherwise; CFL: ratio of ultimate owner's control rights to cash flow rights; OWN2: 1 if the firm has a second-largest shareholder and 0 if otherwise; CG: Corporate Governance score.

hypotheses. Interacting variable FAM with tax avoidance shows insignificant values, which indicates that tax avoidance in family controlled-companies results in a cost of debt which is not marginally higher or lower as compared to tax avoidance done by non-family-controlled companies. This result suggests that in the lenders' perception, tax compliance of a company has nothing to do with the fact that the company is controlled by the family or not.

The next moderating variable tested in this study is the second-largest owner. The output of the test on the role of a second-largest shareholder is consistent with the fourth hypothesis (H4). The second-

largest shareholder has a significantly negative effect on the positive relationship between tax avoidance and cost of debt. Tax avoiding companies that have second-largest shareholder will bear the lower cost of debt compared to those which do not. This result implies that companies that have second-largest shareholder are perceived by lenders as having lesser opportunities for managerial rent diversion through their tax avoidance.

This result enriches the findings of Attig et al. (2008) on the role of the companies' second-largest shareholder. The existence of second-largest shareholder in the company will be responded positively not only by

investors but also in the eyes of creditors. The second-largest shareholder is regarded as a monitoring agent who is perceived to have a monitoring role over the controlling owner that influences the governance and information problem of the companies (Attig et al., 2008).

The last moderating variable is the *corporate governance score* which depicts the effectiveness of a company's board and audit committee. Table 1 shows that the result does not support hypothesis H5, which says that strong corporate governance would tend to reduce the tax avoidance effect on the cost of debt capital. It is found that the effectiveness of the board of commissioners and the audit committee does not have any impact on how the lenders perceive the tax avoidance activities taken by the company.

Although the finding is inconsistent with the hypothesis, nevertheless, it is relevant with the findings in the study conducted by Adam et al. (2015) on the relationship between corporate governance and cost of debt in Indonesia, which suggests that the board members, their independence and educational background, and the effective characteristics of audit committees are not considered by creditors as contributing factors in generating quality financial reports, thus affecting their decision in charging the companies' cost of debt.

Sensitivity Analysis

Alternative Measurement for the Second-largest shareholder. According to the work of Attig et al. (2008), the role of the second-largest shareholder was also

measured using two other measurements namely the degree of control rights held by the second-largest shareholder and the ratio of the second-largest shareholder's control rights to ultimate owner's control rights. The test using the two measurements provided a consistent result with the main analysis on the role of second-largest shareholder (not tabulated).

CONCLUSION

The purpose of this study was to examine the effect of a company's tax avoidance on its cost of debt. The findings of this paper confirmed the notion that tax avoidance would be perceived as higher information asymmetry by lenders resulting in higher cost of debt capital.

This study also examined the roles of corporate governance elements of ownership structure variables (family, the ultimate owner, and the second-largest shareholder) and corporate governance score in impacting how tax avoidance affects the cost of debt. Lenders of companies in the sample perceived that tax avoidance decision taken by family-controlled entities to be indifferent with other companies. What matters to the lenders was how much control was held by the ultimate owner. Higher cash flow leverage would increase the perceived risk as a result of the company's tax avoidance decisions. Moreover, the existence of a second-largest shareholder in the companies was more favourable for the lenders. They perceived that tax avoidance taken by such companies would not have

higher risks, as compared to those who did not have a second-largest shareholder.

This study also found that the board commissioner and audit committee characteristics and effectiveness did not show any sizable impact on the effect of tax avoidance on the cost of debt. The characteristics and effectiveness were not perceived by lenders as making tax avoidance activities taken by the company were less risky for them to charge the companies less interest. The result of this study provides benefits for the corporations as the management and investors comprehend the consequences of undertaking tax avoidance, with regard to their ownership structure and their characteristics and effectiveness of their board of commissioners and audit committees to the overall cost borne by companies. Moreover, the government could also use the result of this study as a campaign tool, persuading companies to be more obedient in fulfilling their tax duty.

Lastly, this paper examined the impact of tax avoidance on the cost of debt through information asymmetry, corporate governance and the existence of different structures of ownership in Indonesia. It would be beneficial if the future study is enhanced with the comparison of Indonesian cases with cases in other developing countries so that the uniqueness of tax avoidance implication on companies in Indonesia can be further examined.

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Breast Cancer Etiologies Among Young Malay Breast Cancer Patients

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ABSTRACT

There is a widely held view that breast cancer etiologies vary among women of diverse social-cultural backgrounds. As such, this qualitative study aimed at identifying the various factors associated with the onset of breast cancer symptoms among young Malay women. Thirteen young Malay breast cancer patients in Kuala Lumpur and several selected areas of Selangor were selected through purposive snowballing technique. In relation to this, ethnographic fieldwork employing a qualitative approach was conducted for approximately 10 months. A series of in-depth interviews, phone and online interviews guided by a semi-structured interview schedule and participant observation were carried out among the informants of this study. From the thematic analysis of the field notes, it is evident from the present study that young Malay informants had attributed their breast cancer illness to supernatural causes and non-supernatural causes. They strongly believed that *saka*, spirit attacks, lifestyles, unhealthy food consumption, and hazardous working environments could have contributed to the onset of their breast cancer symptoms. The findings of the present study are imperative particularly for health care providers to understand the health-seeking behaviours of breast cancer patients in the provision of cancer control, particularly in diverse populations like Malaysia.

Keywords: Breast cancer, etiologies, Malay, non-supernatural, supernatural

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INTRODUCTION

Breast cancer has become a global health concern as it causes deaths to many women of diverse social-cultural backgrounds in most parts of the world (Coughlin & Ekwueme, 2009). In Malaysia, breast cancer is the third cause of death after heart diseases and the leading cause of death

due to cancer among Malaysian women. It is found to be the highest among Chinese women as compared to Indian and Malay women (Azizah et al., 2015). According to the World Health Organization (WHO), one of the key components of cancer control is cancer prevention (Vanita et al., 2011). However, lack of knowledge and awareness on risk factors and symptoms as well as the strong influence of cultural beliefs could have profoundly affected the provision of cancer control in diverse population like Malaysia (Cheng & Taib, 2014; Hadi et al., 2010; Hisham & Cheng, 2003; Taib et al., 2007).

Understanding breast cancer as a cultural phenomenon could be one of the key strategies to reduce cancer-related deaths. This could be done by understanding how the concepts of health and illness are perceived by members of the community. One of the important dimensions in discussing health and illness as cultural concepts is the notion of illness etiology (Foster, 1976; Laderman, 1983; Noor, 1993; Nurge, 1958; Razali et al., 1996; Yahaya, 2005).

Foster (1976) observed that illness etiology differed greatly across societies. In the non-western medical system, two systems are identified to explain illness etiology, namely personalistic and naturalistic systems. The personalistic system specifies that disease is caused by an active agent who may be human such as a witch or sorcerer; or non-human such as a ghost, an evil spirit or supernatural being such as a deity. It is believed that an agent brings misfortune that is purposely

directed to harm a person's life inclusive of illness. According to the personalistic system, religion and magic are intimately tied to illness and therefore prevention of illness lies in the basic personal health strategy emphasizing the 'dos', particularly maintaining a good social relationship with other human beings, ancestors and deities.

The naturalistic system, on the other hand, specifies that illness is associated with the concept of humoral balance. Culturally, it is believed that the human bodily functions and illness are perceived as a consequence of an imbalance in the body's four humours such as 'cold', 'hot', 'dry' and 'wet'. A person is held responsible over his own health as he willfully or carelessly engages in any activity that might upset the balance of his body humours and consequently lead to disease igniting the situation. According to the naturalistic system, religion and magic are largely unrelated to illness thus explains that illness causality is specific to illness alone and does not reflect any misfortune. For example, in the Malay community, deficiency or an excess of one of the body humours is attributed as one of the illness etiologies. It is believed that an excess of blood i.e. the hot humor will probably cause an individual to suffer from vertigo or hypertension. This is because, the excess of the 'hot' element in the body has gone to the head and overheated it (Laderman, 1983).

Noor (1993) in his study among the Malay community, had classified illness etiology into two factors i.e. personalistic and naturalistic. For the personalistic factor, he observed that the Malays

strongly believed that one's illness could be associated with *qada'* and *qadar* Allah, the roles played by spirits like *jin*, *hantu* and *syaitan*, and the use of magic to harm others such as *santau beracun*, *ilmu pengasih* (love charm) or *ubat guna-guna*. Whilst for naturalistic factors, they attribute germs, venomous snake bites from a cobra, wasps stung, mosquito bites, change of climate, and humoral imbalance in the body such as *darah* (blood), *air* (water) and *angin* (wind) as the contributing factors to one's illness. Similarly, Razali et al. (1996) in their study on the etiology of mental illness in Kelantan, Malaysia found that the majority of Malay psychiatric patients attributed their illness to supernatural causes. They found that these patients associated with the role played by supernatural agents like evil spirits and various types of witchcraft such as spells cast on food, drinks or other objects caused illness on the victims. In relation to that, *bomohs* were consulted by the patients for their various methods of treatment that could expel evil spirits and neutralise the effects of witchcraft.

In another study, Yahaya (2005) observed that there are three stages in the classification of illness etiology among the Malay community in Pahang, Peninsular Malaysia. She asserted that one's interaction with his biotic and non-biotic surroundings in the community's ecological system could contribute to one's illness. In the first stage i.e. physical ecology, illnesses are believed to be caused by germs due to one's interaction with the elements in his biotic surroundings. At this stage, the cause of and treatment

for this illness is determined by the patient himself based on the knowledge he has about the illness. Next, in the second stage i.e. human ecology, illnesses are believed to be the result of one's interaction with his physical environment in the non-biotic surroundings. These include the elements of the ecosystem like climate and the soil structure. During this stage, one's suffering or ill-condition could be associated with the change of climate. However, if the cause of an illness is unknown, it would escalate to the third stage i.e. cultural ecology for the cause of illness by attributing his suffering or ill-condition to the will of Allah. At this stage, one's cultural beliefs could largely influence how the treatment is sought and the kind of support provided for the ill person. Often, traditional healers like a *bomoh* will be sought after for help and the family will ensure that the ill person will be provided with the appropriate care until he is fully recovered from his illness.

Among the village folks in Guinhangdan, the Philippines for instance, classify the etiology of illness into natural and supernatural causes. They attribute indigestible food, sudden changes in temperature, strong winds and vagrant breezes, and vapour from the ground when the sun shines after prolonged rain as among the natural agents of illness. Illnesses such as natural incapacitations in women such as *guinduduguan* or bleeding during pregnancy; and natural digestive disorders which are common in babies and children such as *nagooro-oro* or frequent bowel and watery feces are believed to be caused by

these natural agents. On the other hand, they believe that spirit-gods such as *tunanon*, the earth being, *tubignon*, river and ocean spirits, and *cahoynon*, tree spirits; witches and sorcerers such as *daotan* and *palakodan* are the supernatural agents of several group illnesses among the village folks. These include *dahura*, an illness that is recognized by itchiness, spots, aches and pains that are believed to be caused by annoyed *tunannon* and *cahoynon* which throw sands, bits of dirt, or small stones at their victims, and several mental disturbances, yaws, and leprosy which are believed to be caused by sorcerers. Commonly, *daotan* uses several media like a strand of hair from the whorl point on the top or the back of the head or some clothing to inflict illness on intended victims while *palakodan* uses oil and root to inflict sickness and death on his intended victims (Nurge, 1958).

Similarly, in another study by Kamarudin et al. (2006) on breast cancer patients in Kuala Lumpur, Malaysia, they identified lifestyle as the contributing factor for breast cancer risk. In the study, they observed that unhealthy lifestyles such as lack of physical exercise, high consumption of fat in daily meals and short duration of breastfeeding could have contributed to the risk of developing breast cancer among breast cancer patients. This was because women who lack exercise were four times more likely than women who exercise regularly to be at risk of developing breast cancer due to exposure to estrogen hormone secreted in the fat tissues.

Among American Samoans, *kanesa* or cancer is perceived as a new illness brought by *palagis* (westerners). They believe departing from *fa'aSamoa*, i.e. the healthy lifestyle particularly the ones practised by the elderly, as the main cause for *kanesa*. These include eating an unhealthy diet particularly non-traditional food like canned food and refrigerated items, consuming too much alcohol and smoking *palagi* cigarettes. However, drinking *kava* (a traditional Samoan drink) and smoking traditional Samoan cigarettes are not associated with the causes of *kanesa*. This is simply because they never heard anyone in their community suffer from *kanesa* in the past due to drinking *kava* or smoking Samoan traditional cigarettes (Hubbell et al., 2005).

From the foregoing discussions, it is evidently shown that there is no single cause of breast cancer illness. Thus, this study was designed to identify the various breast cancer etiologies among young Malay women in Malaysia.

METHODS

Study Area and Population

Ethnographic fieldwork was carried out for approximately ten months among young Malay breast cancer patients in Kuala Lumpur and several selected areas of Selangor. Kuala Lumpur and Selangor are two neighbouring states located in the central region of Peninsular Malaysia. The breast cancer cases reported in both states were among the highest in the country.

Sampling

Thirteen (13) young Malay breast cancer patients were selected to participate in this study. The purposive snowballing technique was employed to identify and locate potential informants. For this purpose, the National Cancer Council (MAKNA) as the 'gatekeeper' was approached in getting access to potential informants for this study. Informants were selected based on the selection criteria determined prior to the selection of the sample. The selection criteria of potential informants include 1) must be women of Malay ethnicity as the study itself focuses on Malay women; 2) must be of young age defined in the study which is within the age range of 25 to 49 years old and 3) must be among breast cancer patients or survivors. This is imperative particularly in understanding how the concept of health and illness is perceived by those who suffered from chronic illness like breast cancer.

Data Collection Procedure

The data collection consisted of ethnographic qualitative methods i.e. in-depth interviews and participant observation. Prior to the interview, the potential informants were contacted via phone call to seek their consent for participation in the study.

In-depth Interviews. A series of in-depth interviews were conducted with informants in order to identify the various factors associated with the onset of their breast cancer symptoms. Several interview techniques were included such as face-

to-face interviews, phone interviews, and online interviews. The interview sessions were held informally in a semi-structured way, but guided by the interview schedule. Informants' demographic and health profiles and factors associated with the onset of their breast cancer symptoms were covered in the interview schedule. The interview schedule was developed by the researcher guided by the appropriate literature. It was further constructed in consultation with academics familiar within the field of medical anthropology. Most of the interviews were held face-to-face in various settings such as at informants' house, hospital area, oncology ward, cafeteria and hotel lobby. Each interview lasted from around 45 minutes to one and a half hours. In the case where face-to-face interviews with informants were not possible due to several limitations such as time and health factors, the interview sessions would be held either through a phone interview or online interview

Participant Observation. In order to observe several situations described by the informants throughout the interview sessions, participant observation was carried out. On several occasions, the researcher had the opportunity to participate in several events such as accompanying informants for an appointment in the hospital, visiting them when they were admitted to the hospital and attending funerals when informants passed away. All data obtained and events observed and participated were recorded in fieldwork diary

Data Analysis

Thematic content analysis technique was used to analyse the data obtained from the field. The researcher began the analysis by reading and rereading the field notes and online scripts to gain an understanding of the stories conveyed by informants. Codes were then generated in relation to the study's objective. With the subsequent field notes, codes were added or dropped and the coding list was recoded whenever necessary. When the coding was completed, the codes that have common elements were merged and themes or categories that are explanatory to the relevant issues highlighted in the study were formed. All the themes or categories developed from fieldnotes were compared in order to derive the final themes or categories. The final sets of themes or categories later became the findings of the study.

RESULTS

Demographics

Thirteen (13) young Malay breast cancer patients between the ages of 29 to 48 years old were selected for the study. They were of Malay ethnic origin who practised Islam as a way of life and mainly communicated in Bahasa Melayu. Occasionally, some of them communicated in English. They were full-time employees of the government and private sectors, ranging from professionals, managers, officers and clerical staff. As for marital status, the majority of informants were married with at least one child. With regard to the level of education, most of the informants were highly educated for the majority of them attained the highest level of tertiary education. The informants' demographic and health profile is presented in Table 1.

Themes generated from the data obtained in this study in relation to breast cancer etiologies among Malay informants

Table 1
Informants' demographic and health profile

No	Age	Marital Status	No. of children	Educational level	Sector	BC Staging
1	36	Married	4	Tertiary	Government	II, IV
2	29	Single	0	Tertiary	Private	II
3	36	Married	1	Tertiary	Private	I, II
4	35	Married	1	Tertiary	Private	II
5	35	Married	3	Tertiary	Government	II
6	41	Divorced	5	Secondary	Government	IV
7	41	Married	3	Tertiary	Private	II
8	36	Married	3	Tertiary	Private	II
9	36	Married	3	Tertiary	Private	II, IV
10	45	Married	5	Secondary	Self-employed	II
11	42	Single	0	Secondary	Private	II
12	48	Married	2	Secondary	Government	II
13	33	Married	4	Tertiary	Government	II

are attributed to supernatural causes and non-supernatural causes.

Theme 1: Supernatural Causes

It was observed that the informants in this study attributed their breast cancer illness to the role played by supernatural forces such as *saka* and spirit attacks.

Saka (Guardian Spirit). One of the informants, a 39 years old cancer patient associated her breast cancer illness with the role played by *saka*. In on one of the interviews she said:

She believed that her breast cancer was due to 'saka' that was passed down indirectly from her late aunt to her. According to her mother, in the context of their family, 'saka' would be matrilineally passed down from an elderly female in one generation to a younger female in the other generation in their family tree. She was told by her mother that her late grandmother was a 'bidan' (midwife) and wanted her eldest daughter (her aunt) to take over the role as 'bidan' from her grandmother. However, her aunt refused to accept her grandmother's suggestion. A few years later, her aunt suffered from breast cancer and died not long after that. Many of her family members associated the cause of her aunt's illness was due to her refusal to become a 'bidan'. A night before her aunt's

death, she was told by her mother that she and some other family members saw a 'lembaga hitam' (black ghost) sat near her aunt's body which disappeared when her aunt passed away. No one knows exactly what the lembaga hitam was and where did it go after that, but many believed it was 'saka'. She further explained that when she got her breast cancer, her mother strongly believed that it was 'saka'.

Similarly, another informant, a 29 years old cancer patient mentioned:

Many of her relatives told her that her breast cancer was 'saka'. This was due to several incidences of breast cancer in the family on her father's side. She described her grandmother (her father's mother) died from breast cancer and later two of her father's sisters were also diagnosed with breast cancer. Following the incidence, a few years later she and one of her cousins (her father's niece) were diagnosed with a similar illness. However, she narrated did not know how the 'saka' was passed down from one generation to the other generation in her family. None of her relatives including her late father could explain about it to her.

In relation to *saka*, the Malays strongly believe that *saka* is a causal factor for breast cancer illness.

Spirits' Attacks. As in the case of breast cancer illness, several informants interviewed believed that a malevolent spirit i.e. *Jin* is used as a medium to inflict a person with the illness. Several motives were identified such as jealousy or envy over others' achievements to be the causal factor for breast cancer. Another informant, a 33 years old cancer patient had associated the onset of her breast cancer symptoms with *sihir*. This is elucidated in the text below:

She described she came across to know about the 'sihir' in relation to the development of her breast cancer symptoms upon her visit to one of the Islamic healing centres to accompany her husband to seek treatment from an 'ustaz'. According to Shah, she was told by the 'ustaz' that one of her relatives had used 'sihir' to harm her family. Shah described the intention to harm derived from the feeling of jealousy and envy of her wealthy life. The 'ustaz' narrated Shah's relative had send 'benda' (item) through 'angin' (wind) with the help of 'Jin Sihir' to harm her family. The 'ustaz' further described Shah's body was 'lemah' (vulnerable to the entry of spirit) causing her to become the target of the 'sihir'. Indeed, her vulnerability had invited more 'Jin' to collectively stay in her body and developed a 'ketulan' in her breast. She was advised by the 'ustaz' to remove the 'ketulan' for her to be cured from the 'sihir'. In addition, Shah was asked

to practise 'ayat pendinding diri' (recitation of several Al-Qur'an verses) in order to protect herself from the malevolent spirits.

It was observed that *sihir* is still evident and practised in the Malay community in this study. The role played by religious people like an *ustaz* is still significant in dealing with an illness caused by *sihir*.

Theme 2: Non-Supernatural Causes

Several informants believed that the onset of their breast cancer symptoms could be discussed in relation to their lifestyles, food consumption, and working environment.

Lifestyles. Several informants believed that the onset of breast cancer symptoms could be discussed in relation to one's lifestyle. One of the informants aged 35 associated her breast cancer illness with her habit of eating outside food. She said:

She was always busy and tight with her working schedule. As a result, she preferred eating outside food for she did not have time, particularly on working days to prepare her daily meals at home. The doctor had informed her that the habit of eating outside foods was unhealthy for the food commonly contained artificial flavours, oily, high in cholesterol, calories, sugar, salt and 'berlemak' (coconut milk gravy).

Similarly, lifestyle as university students in the past could have also contributed to the

onset of breast cancer symptoms. They were busy then, with classes and assignments causing them to pay less attention to their diet. Often, they enjoyed eating highly processed food like instant noodles and fast food. According to one of the informants aged 36, the food is easily prepared, tastes good and is inexpensive even though they knew the choice of their food was unhealthy. She narrated:

She believed her habit of eating instant noodles when she was studying at the university could have contributed to the onset of her breast cancer symptoms. She enjoyed eating instant noodles because of the easy preparation, good taste and most importantly inexpensive. Often when she was busy with her assignments, she would eat instant noodles. This habit was described by the doctors as unhealthy for it contained unhealthy ingredients like artificial flavours in which if consumed frequently could trigger the growth of cancer cells.

In another instance, one informant aged 36 attributed her habit of frequently eating fast food when she was a student in the university as one of the contributing factors to her breast cancer illness. She narrated:

She enjoyed eating fast food like burgers and pizzas when she was studying at university. Almost every week when she went outing with

her friends, they would go to any of the fast-food outlets for their meals. The habit continued until she was diagnosed with Stage 1 breast cancer a few years ago. She strongly believed her unhealthy choice of food when she was a student could be one of the contributing factors to the onset of her breast cancer symptoms. She was informed by the doctors that the habit of eating highly processed foods like fast food is unhealthy for the food is lack of nutrition and contain a high amount of calories, refined sugars, and salt. She believed that these ingredients could have caused the onset of breast cancer symptoms.

It is evident that lifestyles and choice of food were interrelated in explaining the onset of breast cancer symptoms. This was due to the fact that many informants were busy and tight schedules of which they took for granted choosing food merely at their convenience for their daily meals. This unhealthy and imbalanced diet was believed by Malay informants as contributing to the onset of their breast cancer symptoms.

In addition, their working lifestyles did also contribute to poor breastfeeding practices. In relation to this, one informant aged 45 believed that the onset of her breast cancer symptoms could be associated with her inconsistent breastfeeding practice. She described as below:

She narrated she could not consistently breastfeed her son

despite having high production of breastmilk. According to her, she started to inconsistently breastfeed her six months old son when she accepted an offer to enroll in a professional teaching course. She described that she lived on campus during weekdays and only went home during the weekend. This new routine had caused her not only unable to consistently breastfeed her son but also caused soreness in her breasts resulting from high production of breastmilk. For that reason, she decided to stop breastfeeding to avoid 'bengkak susu' for it also caused throbbing-like pain or 'sakit berdenyut-denyut'. After discussing it with her husband, she went to a clinic to consult a doctor on her decision. She was given medication to stop the production of her breastmilk. This was believed had caused the clog in her breast duct area and later developed into the symptom of breast cancer. It was confirmed by the doctor that the development of her breast cancer symptoms was caused by the clog in her breast duct area.

Several informants narrated that they had been informed by the doctors that the onset of their breast cancer symptoms was caused by a clogged in their breast duct area which could be associated with the short duration of breastfeeding.

Food. Several informants associated types of food consumed with breast cancer symptoms. One of the informants aged 42 for instance, enjoyed eating animal's internal organs and charcoal-grilled food for many years before she was diagnosed with Stage 2 breast cancer. She described as follows:

She narrated that she loved eating animal's internal organs like chicken liver, gizzard, and intestines and preferred them to be fried before she was diagnosed with Stage 2 breast cancer. According to the doctor, her preference for the food could have contributed to the development of her breast cancer symptoms. In relation to that, she was advised by the doctor to stop the consumption of the animal's internal organs for they were highly toxic and rich in calories. The doctor explained that an internal organ like the liver helped to carry body waste produced in the body and restore the wastes in the body before being purified. Therefore, each time when she ate any animal's internal organs, it was like indirectly she was eating the toxic waste residing in the organ. This could bring harm to her health and placed her at a higher risk of developing many other illnesses.

Besides, several informants also attributed high consumption of charcoal-grilled food such as satay, *ikan bakar*

(grilled fish) and *daging bakar* (grilled beef) as the etiology of breast cancer. Another informant aged 29 for instance, strongly believed that her high consumption of food like satay and *ikan bakar* could have contributed to the growth of cancer cells in her breast area. She said:

She enjoyed eating charcoal-grilled food such as satay and 'ikan bakar'. The doctor told her that the food could have contributed to the development of her breast cancer symptoms for the food contains carcinogen that is believed could trigger the growth of cancer cells in the body.

In another instance, high consumption of *kerang-kerangan* (shellfish), like *Lala*, and *Siput Sedut* was believed to be responsible for the growth of cancer cells in their body. One of breast cancer patients aged 41 said that:

She was told by the doctor that 'kerang-kerangan' like 'Lala' and 'Siput Sedut' contained toxic because many of their habitats were contaminated. The toxicity from the food was believed could have triggered the growth of cancer cells in her body. In relation to that, she was advised by the doctor to avoid eating 'Lala' and 'Siput Sedut' for her to be cured of breast cancer.

Similarly, high consumption of junk food by the informants such as *keropok* (crackers), *jeruk* (pickle) and soft drinks had

contributed to breast cancer illness. They believed that these foods were unhealthy for they contained artificial flavour, preservatives, colours, and high sugar. This could eventually lead to the onset of breast cancer symptoms. One of the informants aged 36 narrated:

She enjoyed eating 'keropok' and 'jeruk' since she was small. She described the habit was unhealthy for the food contained additive and lack of nutrition. She was informed by the doctors that food containing high amounts of additives like preservatives, colours, and flavours were unhealthy in the long run for the substances that could cause food reactions and symptoms of many illnesses including cancer. In addition, she disliked eating vegetables and fruits, thus making her a higher risk of developing many diseases including breast cancer. For her, she believed the high consumption of junk food and lack of vegetables and fruits could have contributed to the development of her breast cancer symptoms.

Working Environment. Another important dimension observed is the working environment. One of the informants, 33 years old cancer patient believed that her working in a weaponry laboratory together with handling chemical waste could have triggered the growth of cancer cells in her breast. She narrated as follow:

According to her, she worked in a weaponry laboratory and was attached to a chemical department that deals with the handling of chemical waste. Although several occupational safety procedures like wearing a mask and tagging the waste according to its classification were observed during the handling of the waste, she did not exclude the risk of harm caused by handling hazardous waste. This was because the presence of electromagnetic waves in the working environment had caused positive charges from hazardous waste and negative charges contained in her body to attract to one another and consequently triggered the growth of cancer cells in her breast. Indeed, she narrated there were several cancer cases reported among laboratory personnel in her workplace a few years ago before she was diagnosed with Stage 2 breast cancer.

The above case highlights the role of the working environment in determining one's health status. It can be suggested that a healthy working environment promotes good health, whilst an unhealthy working environment as a causal factor for breast cancer development.

DISCUSSION

The concept of *saka* as an etiology of illness is not entirely new among the informants.

The *saka* refers to a spirit helper and guardian (Endicott, 1991) or ancestral possession (Ismail et al., 2010). They associated *saka* with their breast cancer illness. They believed *saka* was a family guardian spirit protecting the welfare of family members. The guardian spirit could be their assistant or family helper in undertaking household chores or working at the orchard. In another instance, the *saka* can be one's guardian spirit in treating one's illness, or medium to assist the traditional healer or *bomoh* either during medical consultations, performing rituals or séances or in carrying other duties during treatment procedures. The *saka*, according to several informants, will only be passed down within one's family tree. It is meant for family welfare and can be inherited. In relation to this, the informants believed that *saka* can be an etiology for breast cancer symptoms. This takes place when a person refuses to inherit the *saka* or guardian spirit and decides not to comply with the conditions laid down and agreed in the family i.e. performing rituals to appease the spirits. Another reason for incompletion is due to the fact that the rituals are against Islamic teachings. Many informants refused to carry out or undertake such obligations for fear of *shirik*. Furthermore, many of the informants interviewed refused to be a healer or *bomoh* or *bidan* as part of the condition in accepting the *saka*. As a result, they could suffer from illness or other forms of misfortunes throughout their lives. The misfortunes include bad luck, accident, spirit attack to other family members, and illness.

Aside from *saka*, the onset of one's breast cancer symptoms could be attributed to spirit attacks. In Malay cultural beliefs, spirit attacks refer to bodily possession (Chen, 1970). There are several types of spirit attacks such as evil eye, magic, and *sihir*. In general, there are direct attacks like stepping over the abode of spirits which eventually could cause a person suffering from illness like *terkena* (Metcalf, 1982), *rasuk* and hysteria (Radzi et al., 2015; Saparudin et al., 2014), and indirect attack i.e. involving the spirits for instance, malevolent spirit, and applying *sihir* or magic (Endicott, 1991). There are several factors for this including jealousy, envy or other forms of ill-interpersonal relationships (Ito, 1982). For Malay informants, an *ustaz* is respected and highly sought after on many occasions of Muslims' lives including matters related to their health and illness for his religious knowledge. This includes the ability to perform spiritual healing to treat illnesses caused by spiritual forces. This is similar to the one observed by Suhami et al. (2015) that the Islamic healing technique had become increasingly popular among Muslim cancer patients to treat the symptoms of their illnesses caused by supernatural agents.

Besides, Malay informants believed that their lifestyles either as career women or students in the past could have contributed to an unhealthy diet and poor breastfeeding practices. An unhealthy diet, for instance, includes their habit of skipping breakfast, having late dinner, eating outside foods, and frequent consumption of processed food. As

a result, they were informed by the doctors that their diet was unhealthy for the amount of food consumed in their daily meals was imbalanced and was not following the food pyramid i.e. do not include all classes of food with the suggested amount per serving. In Malay cultural belief, a healthy diet means a balanced diet. The concept of a balanced diet refers to the humoral balance between the elements of *panas-sejuk* (hot-cold) in one's diet. It is believed that excess in any of the humoral elements, be it *panas* or *sejuk* in the diet would cause an imbalance and become unhealthy.

As career women, several informants described the nature of their work as having to work with strict datelines had caused them to develop the habit of eating outside food. They enjoyed eating outside food instead of preparing their meals at home for they were always busy and tight with their working schedule. Thus, the choice of food could be imbalanced and unhealthy. They strongly believed that the food served at restaurants and stalls, for instance, did not comply with the food pyramid concept or principle as recommended by doctors. Most of the foods consumed contained artificial flavour, high calories, and cholesterol, a high amount of sugar and salt, oil, and fewer vegetables. Such unhealthy eating habits could have contributed to their breast cancer symptoms.

Furthermore, Malay informants associated their life as career women together with tight working hours which had hindered them from fully breastfeeding their children for the recommended duration i.e.

two years. They described that the nature of their work that required them to attend professional courses for career development, for instance, had caused them not to be able to breastfeed their children consistently. This was because upon attending the course, they had to stay on campus during weekdays and would only return home over the weekend. They described that when they were on campus, they were neither able to breastfeed their children nor press and store their breastmilk for their children. The inconsistent breastfeeding had caused *bengkak susu* or soreness in their breast. They were informed by the doctors that the symptom of *bengkak susu* suffered from inconsistent breastfeeding could cause clogging in their breast duct area. It was believed the clogged area could have caused the growth of cancer cells in the breast areas. From the foregoing discussions, it can be suggested that breastfeeding practice had a protective effect on the risk of developing breast cancer. This finding is similar to the one observed by Huo et al. (2008) among indigenous Nigerian women. He found that there was a reduction of 7% of breast cancer risk among women who breastfed their babies more than 12 months or longer.

The onset of breast cancer symptoms is very much related to the type of food one consumes in his or her daily meals. Food that contains toxic, high calories, carcinogen, and additives are harmful to health and believed by many informants in the study were responsible for breast cancer development. Malay informants strongly believed that consuming animals'

internal organs charcoal-grilled food, *kerang-kerangan*, and junk food could lead to breast cancer. It is believed that carcinogens from charcoal-grilled food, in particular, the burned parts and toxic from *kerang-kerangan* for instances, could have contributed to the onset of their breast cancer symptoms. During medical consultation with doctors, they were advised to avoid eating charcoal-grilled food for it could prevent the growth of cancer cells in the body, from becoming aggressive or spreading to the other parts of the body.

Several informants also described that their working environment was unhealthy for they had to work in the laboratory and handle the hazardous chemical waste. It had constantly exposed them to radiation. They believed that the working environment could have contributed to the onset of their breast cancer symptoms. This was further confirmed when they went to seek medical consultation in relation to their breast cancer symptoms. The doctor told them that constant exposure to radiation is harmful to one's health for the presence of electromagnet in the environment could have triggered the growth of cancer cells in the body.

CONCLUSION

Different breast cancer etiologies were identified that could be attributed to supernatural causes such as *saka* and spirit attacks, and non-supernatural causes such as unhealthy lifestyle, imbalanced diet, and exposure to radiation in the workplace. As for supernatural causes, two issues in

relation to spirit attacks were observed. Firstly, *sihir* is still evident and practised in the Malay community in this study. Secondly, the significant role played by religious people like an *ustaz* in dealing with illness caused by *sihir*. Thus, it can be concluded that the various etiologies for breast cancer have contributed to the unique picture of the illness among Malay women in the study.

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Case Study

**Cultural Obstacles to Changing Social Food Taste of Iranians;
Case Study: To Change the Taste from Traditional to Bulky Bread**

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ABSTRACT

Due to social, cultural, and economic reasons, however, eating habits are not easy to change. Food taste formation begins at birth with breastfeeding and evolves throughout the life course under varying social and cultural circumstances. Since the formation of food taste occurs within social and cultural contexts, changing the related habits is subject to the same influences. In this research, we demonstrated how our samples preferred to use traditional white breads like “Sangak”, “Barbari”, and “Lavash”, instead of bulky baguettes and French breads that were presumed to be more nutrient-rich. This research was done by deep interviews with 20 people from Tehran, the capital city of Iran. Our study had been conducted in the qualitative research framework through in-depth interviews. The major reasons people gave for their food choices in favour of traditional breads included availability, family routines, ceremony, lower prices of traditional breads, and, most importantly, the habit of consuming traditional breads developed from childhood. On the

other hand, and despite the constant media promotions in favour of bulky breads, its consumption was not equally distributed among social classes. This research shows that economic condition, education, and exposure to media are influential factors in determining consuming behaviours regarding bulky and traditional breads.

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INTRODUCTION

Regardless of biological and genetics discussions of olfaction, gustation, and the central nervous system in its formation, human taste is, nevertheless, cultural. Food taste formation begins at birth by breastfeeding and continues throughout the life course. Depending on which culture the child grows in and the relevant food habits, food taste formation reaches its peak at the age of six months when the child starts to eat. In adulthood, acculturation determines the preferences and detestations of food tastes. Although genetics do play a role in food preferences in humans, the various food tastes across distinct cultures prove it to be a cultural phenomenon.

Through eating, we both eat our culturally accepted foods and acquire the gustatory experience of our own culture. We also both consciously and unconsciously actuate the meanings embedded in foods and let them in our mental processes. In fact, tastes are cultural choices and demonstrate cultures. Tastes are interwoven with culturally specific events and practices. Thus, they are attributed to, experienced via, and recalled through specific savours. In social life, foods are accompanied by several markers; during consumption, all these networks connecting food and the rest of society together start being actuated and turn eating into a social experience (Izadi, 2013).

In his work *Distinction*, Pierre Bourdieu (Bourdieu, 2011) illuminated how specific groups, in particular social classes, delineated their life style and distinguished

it from that of others through their choice of goods, clothes, foods, cosmetics, furniture, and interior design. In his work, Bourdieu perused the relation between food, taste, and class, and argued that the working class considered food as belonging to the material world, whereas the bourgeoisie (the middle class) disaffirmed the distinction between the private and public spaces and between natural and supernatural, and so let the form and sensation shaped the experience of eating. Social classes distinguish themselves from each other through food and tastes. Teachers, whose cultural capital overweighs their economic capital, follow an austere way of consumption, and seek authenticity in a way that ensues minimal economic costs. The professional experts or senior managers, on the other hand, disaffirm the common taste found in stodgy, high-fat, rare, and royal foods that are prepared in traditional ways of cooking. According to Bourdieu's approach, food taste depends on the images of the body circulating among the social classes and the impact of food on it; these include ideas about power, health, and fitness by which classes assess certain impacts. Accordingly, the lower classes, who mainly seek physical power and masculinity, are fond of inexpensive, nutritious foods, whereas professional experts and upper classes prefer types of food that are tasty, healthy, and light to prevent gaining weight (Bourdieu, 2011).

For Bourdieu (1984), tastes were the practical affirmation of an inevitable difference, a system of classificatory schemes, or the source of the system of

distinctive features that could not fail to be perceived as a systematic expression of a particular class of conditions or existence.

Douglas paid attention not only to flavour, but also to texture, temperature, colour, and other visual patterning elements, grouping tastes in sets of oppositions that structure particular meals and the relationship among different meals. For example, he noted “the same recurring theme is visible in the sequence from thick gravy to thicker custard to solid icing sugar” (Douglas, 1982). Douglas thus presented an early possibility for considering multiple sensory dimensions of food. However, her work, like Levi-Strauss', was oriented toward abstracting binary patterns in sensory features that reflected other structured aspects of “the food system” and its relationship to “the social system” (Douglas, 1982), identifying degrees of intimacy and distance, and identifying group boundaries (Douglas, 1971; see Lalonde, 1992 for a detailed critique). Furthermore, her sensory categories, like those of Levi-Strauss, were based on observation, not on informant descriptions or categories. She did suggest some potential cultural variability in the “degree of autonomy” of the rules of combining colours and textures in the food system in particular societies (Sutton, 2010). Seremetakis moved considerably further in using this—and other ethnographic and self-reflexive vignettes of drinking a cup of coffee, gathering greens, memories of the taste and smell of her grandmother's house in the country—to develop an analysis of the relationship between the senses and

memory, materiality, modernity, and local epistemologies. The sensory is not only encapsulated within the body as an internal capacity or power but is also dispersed out there on the surface of things as the latter's autonomous characteristics, which then can invade the body as perceptual experience (Seremetakis, 1994). “The first sweetened cup of hot tea to be drunk by an English worker was a significant historical event, because it prefigured the transformation of an entire society, a total remaking of its economic and social basis” (Mintz, 1985). Therefore, since food taste formation takes place in social and cultural contexts, its changes are also under the influence of social and cultural circumstances.

Rozin and Rozin (2005) had written suggestively about the forces of conservation versus boredom in tastes and the influence of socially shaped flavour principles in making innovations acceptable or unacceptable. Studies of changing taste—while provocative—have, by and large, been speculative about large-scale trends (Haden, 2005) or focused on top-down mechanisms, such as official Soviet policies on luxury consumption (Gruknow, 2005) or Japanese corporate marketing efforts (Cwierka, 2000). Everyday life and the multiple contexts are arenas in which the culturally shaped sensory properties and sensory experiences of food are invested with meaning, emotion, memory, and value (Sutton, 2010). Change of food taste among a given population occurs within various durations of time that depend on many variables. The available sources to

prepare food, the sacred and the profane foods, food consumption among the social strata, in ceremonies and traditions, media and the food production advertising, and physicians and their advices about healthy and unhealthy foods are all among the factors which may affect the change of food taste.

Nowadays, healthy diet is one of the debatable issues in human societies. The increase of diseases, like diabetes and obesity in modern societies, is partially the consequence of unhealthy diets. The issue has compelled the health policy-makers to prioritize food patterns with the minimum mal-influence on the body ahead of their programs. Due to cultural, economic, and social reasons, the change of food consumption styles in human societies does not occur simply. A food habit, which has formed over a period due to famine or lack of food productions, may cause diseases in the long run. These food habits could form based on the available foods in the relevant environment. Improper approaches in general policies sometimes lead to the formation of food habits that eventually result in the outbreak of chronic diseases and are, in turn, followed by enormous costs for the whole economy. The change of food habits in a brief period in such circumstances appears to be a demanding task, as individuals live with tastes and savours and health-related advices cannot impel them to change diet.

Our study focused on bread consumption behaviour in Iranian society. In Iran, the bread consumption rate is on average 440

g. per person, indicating it is an inseparable part of the Iranian diet (Abedi & Abedi, 2015). There are several types of bread with various consumption rates in Iran:

Traditional breads: *Sangak*, *Barbari*, *Lavash*, and *Taftoon* are varieties of traditional bread in Iran that are flat and are baked in traditional ovens. In recent years, baking yeast has been substituted by baking soda, which drastically decreases the bread's nutritive value; recently, Iran's Ministry of Health has issued a ban on its use in baking breads. *Sangak* used to be baked with whole-wheat flour, but currently few bakeries in Tehran use this ingredient. This type of bread used to have specific importance because of whole-wheat flour. One of the distinctive characteristics of *Sangak* is that, in comparison to *Lavash* and *Taftoon*, it is bulky. *Barbari* is the other relatively bulky and popular bread in Iran. This variety also has become poor in quality from using baking soda in its dough. *Lavash* and *Taftoon* are flatbreads and, in comparison to other types, are of poorer nutritive value from using baking soda and salt in their baking processes. These two are baked more than other types because of their straightforward way of baking, quick processing, and affordability. The waste of *Lavash* and *Taftoon* are more than other varieties and cause up to hundreds of billions of economic costs annually.

Bulky breads: In these varieties, using baking yeast, enough resting time, and demanded steam heat result in a favourable fermentation. The fermentation process is accompanied by gas emissions occurring

more evenly, which leads to a bulky bread. The breakage of long starch chains during fermentation makes the bread more easily digested. If baked with whole-wheat/barley flour, these types would be of high nutritive value.

Dietary breads: This category includes high-fibre breads for some people with diabetes, gluten-free breads for people with Coeliac disease, and low-protein breads for people with kidney diseases (Aram & Torabi, 2015).

In Iran, 65% of baked flatbreads (*Lavash* and *Taftoon*) are of inferior quality and nutritive value. Although the *Sangak* fermentation process takes hours, 6% of this variety are not porous enough and have poor nutritive value and durability. Despite complete fermentation processes, the same goes for the other types, as 25% of *Barbaris* and 4% of bulky breads are of poor nutritive value as well, because during the milling of white flour, the fibres and much of minerals (iron, calcium, zinc, magnesium, and phosphorus) are lost. According to the research carried out on this issue, constant consumption of such breads plays a considerable role in the outbreak of noncontagious diseases, particularly being overweight, diabetes, hyperlipidaemia, and cardiovascular diseases. High flatbread waste rates (*Lavash*, *Taftoon* and machine-made breads), a drop in the quality of bulky traditional breads (*Barbari* and *Sangak*), and the declining popularity of bulky breads are implicated as the main causes of such diseases and enormous economic costs.

The aim of the current study is to investigate the factors underlying the declining popularity of bulky breads that are presumed to be healthier than flat types. We assume that people are relatively aware of bulky breads being healthier than flatbreads. Therefore, the other relevant question arising is why they prefer to eat flatbreads despite their relative knowledge of its disadvantages. The answer to this question would assist organisations like the Ministry of Health in planning the best food basket for the families through related cultural and economic programs.

In Iran, there are many ethnographies about food and bread among different urban, rural and tribal populations (Moradi, 2007). In these ethnographies, the processes of cooking bread and ceremonies and rituals relating to bread are described (Chegelvand, 2014; Ghasemi, 2015; Izadi, 2013; Majidi, 2007; Rangbar, 2018; Zade, 2007).

There were various traditional breads in Shazand (a city in Arak province) which Shazand women used to cook at home; but they no longer cook breads by themselves and buy their required bread from bakeries (Ghasemi, 2015). Bread plays a main role in the life of Lak tribes in Lorestan Province. Bread is the main food for them. Their women cook bread at home and teach cooking bread to their girls (Chegelvand, 2014). City of Hamedan has various types of breads and ovens and there are set of beliefs and rituals around bread (Rangbar, 2018).

In all of these researches, bread and its role (digestive, cultural) in different culture and population in Iran has been described.

Researches do not address to evolutions of cultural modes and patterns of bread consumption and factors affecting these changes.

MATERIALS AND METHOD

The current study consisted of 20 residents (nine males and 11 females) in Ekbatan that is a middle-class neighbourhood of Tehran, capital of Iran. Because we wanted to control the economic class in our sample, the region was chosen since people in this neighbourhood were neither poor nor rich; we chose our sample from various age and education groups for controlling all the effects on their bread preference in their daily lives. The participants were 25 to 60 years of age. The education level ranged from high school Diploma to Master's degree. Most of them were clerks and some female participants were householders. The availability of different bulky breads for residents was checked in the neighbourhood. There was one bulky bread bakery, two *Sangak* bakeries, two *Barbari* bakeries, and three *Lavash* and *Taftoon* bakeries in the neighbourhood.

Our study had been conducted in the qualitative research framework through in depth interviews. Interviewees were asked to describe their family's food baskets. Then, they were asked to name the types of breads they consumed most often. Another question was about the level of awareness regarding the healthiness of bread varieties. Influential factors determining the choice of the bread, types of bread consumed in paternal houses, ideas about healthier types of breads, types

of bread they preferred, and why they preferred it were among the questions asked in the interview. Asking about the memories of breads and whether they consumed bread on separate occasions comprised the rest of questions. We analyzed our data after categorizing them in five groups: nostalgia, cost, availability, family, and social, cultural and economic capitals.

RESULTS

The results of our study demonstrated that 80% of the interviewees were familiar with the properties of bulky whole-wheat breads, but only 20% of them consumed it constantly or occasionally. The awareness about the bulky whole-wheat breads being healthier was acquired via television and radio programs, virtual networks, and the internet. Some of the participants were aware of the properties of bulky whole-wheat breads, since they had studied medicine. The age of interviewees did not affect the level of awareness, but the way the awareness was gained was under the influence of certain factors. Internet and virtual networks were the sources of awareness mainly for younger participants. The elderly with hyperlipidaemia, diabetes, and hypertension gain such awareness mainly through diets prescribed by specialists. The level of education, particularly in medical sciences, had a direct impact on choosing the type of bread, so that the medical sciences graduates or the participants with such specialists in their families were more aware of the properties. However, such awareness did not necessarily compel the individual to

consume healthier breads and most of the cases still preferred traditional flatbreads.

The determinants of the preference towards the traditional flatbreads over bulky whole-wheat ones include the following categories, discussed from the most to the least important.

Taste and Smell Differences and Nostalgia

Ninety percent of the participants in our study considered taste, smell, and familiarity of consumption from childhood as the main reasons for their preference towards traditional breads like *Sangak* and *Barbari*. Eating *Sangak* with cheese and basil in the morning, or at the time of breaking the fast in the evenings of *Ramazan* and *Barbari* as a part of dinner, were among the reasons that evoked participants' nostalgia. The smell of *Sangak* and *Barbari* in the bakeries reminded them of their old neighbourhoods, or the summer nights on the pool-side beds in their grandparents' yards, where their grandfathers arrived with breads in their hands and they ate the dinner that the grandmother cooked with those tasty breads. Some point to the memories of standing in bakery lines for a long time and all the childhood playfulness: "once, one of my friends and I on the way home were talking and eating the *Sangak* I bought, when I arrived home the bread was almost eaten," a participant said. None of our participants were fond of bulky baguettes, called "fantasy breads" in Iran. Some of them called these types sandwich breads, which reminded them of memories about

the sandwiches rather than baguette itself. They hardly could imagine eating their breakfasts with a baguette instead of *Sangak* and *Barbari* or a bite of kebab and basil with a baguette instead of *Lavash* and *Sangak*. This was similar for *Abgoosht* as well; a traditional broth in which participants preferred soaking *Sangak*, *Barbari* or *Lavash* instead of the so-called fantasy breads. One of them laughed and said, "imagine a table for breaking the fast or *Nazri* (charity food) with baguette!"

Cost

Most of the participants preferred traditional breads, because the bulky types were more expensive. The bulky breads were three times as expensive as the traditional ones, among which *Sangak* is the most expensive. Owing to the economic cost, the families preferred the traditional breads they consumed daily. However, in response to the question whether they would consume bulky whole-wheat breads were they less expensive, most of them answer "yes, but not always." The reason was that taste and smell were still of significant importance to them.

Availability

Most of our cases had pointed to availability as another reason regarding their preference. There were traditional bakeries in the neighbourhood that made providing these types so easy for the families, while bulky breads were only offered by supermarkets or only one bakery in the neighbourhood, if any, and thereby not so close to all families.

Family and Relatives

Despite their own interests in bulky breads, in some cases, they must eat traditional breads because of their families' and relatives' preferences. They believed there were a lot of people who did not like the taste of bulky whole-wheat varieties. Particularly, serving bulky breads in parties was not readily accepted.

Economic, Cultural, and Social Capitals

The findings of our study suggested that individuals with higher levels of economic, cultural, and social capitals were more interested in bulky whole-wheat breads. Despite their food tastes towards traditional varieties, they preferred bulky whole-wheat breads for health reasons. The current research demonstrated that following a specific cultural life style and being distinguished from those following other styles result in consuming bulky breads in families belonging to that cultural stratum. Although the bulky varieties were more expensive and less available, and despite formed taste and nostalgia involved in traditional breads, these families preferred to consume bulky breads. They pointed to healthy families and generally healthy members of the whole society as their reasons for preferring bulky breads; this, they believe was, achievable through providing a proper and healthy food basket.

DISCUSSION AND CONCLUSION

Nowadays, a healthy diet is one of the debatable issues in human societies. The

increase of diseases, like diabetes and obesity in modern societies, is the consequence of unhealthy diets. The issue has compelled the health policy-makers to prioritize the food patterns with the minimum health detriments in their programmes. The change of food consumption styles in human societies due to the cultural, economic, and social reasons is not simple to pursue. From past to now, humans have eaten not only for sustenance, but for pleasure too, and food has helped shape the creation of societies and religions as well as nations and corporations (Siegel, 2018). Food is not only the source of nutrition for human, it plays various roles in our daily lives, beliefs, and socioeconomics. So, eating as such a wholistic process can be influenced by economic, political, cultural, and many other factors (Ma, 2015). The taste of food is not just a physiological stimulus–response of individuals to tasting; rather, it is a shared cultural activity as well. We can recognize the taster as a reflexive actor that communicates, performs, manipulates, senses, changes and embodies taste rather than passively perceives a certain experience of food (Højlund, 2014).

This study showed that its participants preferred traditional white flatbreads, such as Sangak, Barbari and Lavash, to bulky whole-wheat types, for example. Because of white flour in the baking process, traditional breads are implicated as one of the causes of being overweight. Because they are baked under direct heat, they are also of poor nutritive value. Since bread is one of the essential parts of Iranian food, its inferior quality will culminate in conditions

like diabetes, hypertension, and obesity. According to our collected data, nearly 80% of the interviewees were aware of the properties of bulky whole-wheat breads and their health benefits. The awareness regarding bulky whole-wheat breads was gained via television and radio programs, virtual networks, the internet, physicians, and some education in medical sciences. Yet, few of the participants exclusively consumed bulky whole wheat breads. The main reasons for the inconvenience included lack of interest in bulky breads, taste and smell of traditional breads, and determinants that bustle with childhood memories and nostalgia. The habit of traditional breads being elements of parties and ceremonies like *Nazri* had also led to such preferences. The reluctance in using bulky breads extended so far that even imagining the bulky breads at such occasions or ceremonies seems to be ridiculous to participants. Less availability and the triple cost of such breads were the other causes the interviewees stated. It is surprising that, despite being influenced by the facts, there were some among the participants who preferred bulky whole-wheat breads. Consuming bulky breads appeared to be a component of the culture to which they belonged. Besides other distinguishing factors and contributors, these participants had chosen to follow a distinct eating style. These individuals had higher levels of economic, cultural, and social capitals, and eating bulky bread was deemed to be a socio-cultural activity on their side to ascertain the health of society through the health of their own families.

Therefore, the findings of current study support Mary Douglas's notion about the sociability of taste throughout the course of life, and the sociability of individuals through savours and tastes. This sociability leads to the formation of eating habits the changing of which, like any other cultural phenomenon, is a challenging task. Informing people and raising their awareness seems inadequate to changing their tastes in the short run. Awareness raising might be the first step but changing the tastes of individuals needs some extra drive. It seems that raising the level of awareness in individuals with higher levels of economic, cultural, and social capital facilitates change. According to Bourdieu (2011), differences in eating styles and other practices distinguish individuals from each other. In relation to bread consumption in different social strata, this distinctiveness is absolutely evident. As a matter of experience, the prevalence of consuming certain food products or other lifestyle elements, like furniture, clothing, and leisure in higher social, economic, and cultural classes (the elite), will sooner or later extend throughout the rest of society. Nonetheless, it is obvious that economic and political determinants affect the trend of any change in consumption patterns. For instance, following the then Shah's command, cultivating tea began in 1901 in the northern part of Iran; it was that switching from coffee to tea began. Prior to that, people drank coffee instead of tea. After more than a century, teahouses are still called coffee houses or cafes, although no

coffee is served in them. The change of taste from coffee to tea did not happen overnight. At first, the royal family drank tea, and it then spread to the northern parts of Iran, and, finally, the whole country adopted the habit (Yazdani, 2010).

Therefore, despite the current resistance to healthier bread consumption in Iran, informing and raising the level of awareness via media and specialists, and embracing bulky breads in higher socio-cultural classes, the goal of a daily increase in bulky breads consumption is hopefully attainable in the future. In addition to informing the members of society, provisioning general policies will improve the trend of change as well. Moreover, moderation of prices and improving the number of bakeries baking bulky breads will encourage their substitution.

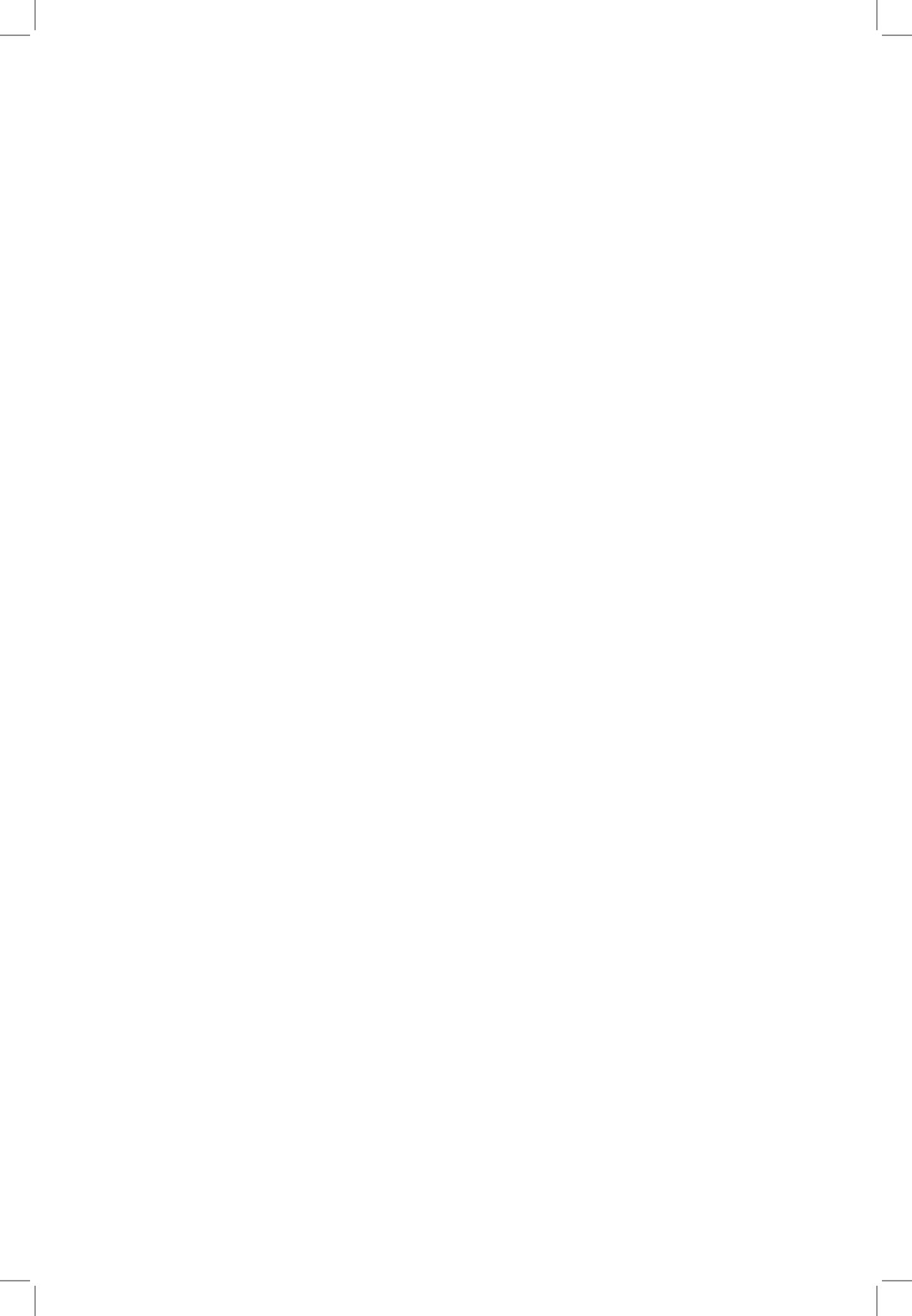
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Linking Privatised Large-Family Domestic Space with a Public Audience: An Analysis of Housewives who are YouTube Vloggers

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ABSTRACT

Amateur vlogs on YouTube provide a glimpse of everyday life and reveal things one might not normally show in public. This paper explored two case studies, female-run YouTube accounts *Jamerrill Stewart*, *Large Family Table* and *Parsnips and Parsimony*, and focused on how both accounts blurred the boundaries between private and public lives as they invited the audience to know about their domestic lives. It aimed at exploring how these female vloggers constructed a particular self-presentation while using YouTube as a personal online diary to archive their everyday lives. The study, however, avoided depicting vlogs as “reality” because vlogs, just like any other audio-visual medium, could be edited. The research findings revealed that in constructing their self-presentation, both women offered an unstructured portrayal of large-family lives in comparison to the representation of American family lives in other mainstream media, such as television (TV) reality shows. By showing the audience incidental and chaotic everyday occurrences for instance, children arguing, messy living rooms, or what they called “real life”, these vlogs were redefining what was understood as “reality” in audio-visual material.

Keywords: Everyday lives, female vloggers, large family, representation, YouTube

INTRODUCTION

The development of new technologies is changing the hierarchy of power in the social and political realm, particularly regarding gender. These new technologies, including social media, have the potential to alter the boundaries between private (domestic) and public lives, particularly for women. New technologies also create new spaces for interaction and participation

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(Molyneaux et al., 2008). Interaction and participation are crucial in social media because they disrupt the social and cultural conventions of patriarchal ideologies, creating spaces for women to articulate themselves in the virtual public space. The cultural representation of women and their everyday lives in social media is becoming an arena in which socially constructed femininity is negotiated, evaluated or even reproduced.

YouTube, which was established in 2005, has evolved into the most popular video-sharing website and hosts more videos than any of its rivals. It contains many types of content; however, most YouTube videos are amateur and document the everyday lives of vloggers (Godwin-Jones, 2007). Strangelove (2010) stated that:

YouTube is not merely an archive of moving images. It is much more than a fast-growing collection of millions of homemade videos. It is an intensely emotional experience. YouTube is a social space. It has become a battlefield, a contested ground where amateur videographers try to influence how events are represented and interpreted. (p. 4).

These home videos, according to Strangelove, are not merely documentation. They also display the expressions and creativity of the creators, making YouTube a social space for its users. Day-to-day activities are represented and interpreted through these homemade amateur videos

(Rettberg, 2014). These videos have become a space to connect with other YouTube users (Christian, 2009).

YouTube has been utilised by female vloggers to articulate their agency even though it has been often claimed as a male-dominated digital technology. Szostak (2013) highlighted how female vloggers were actively involved in the YouTube community based on an analysis of video responses to the video "Girls on YouTube". Maguire (2015) argued that female vloggers, particularly Jenna Marbles, negotiated with the mainstream demand that young girls needed to be able to market themselves as "hot" if they wanted to gain popularity on YouTube. Maguire (2015), pointed out that:

Her strategy is to offer a range of self-representations that are sometimes contradictory (like the nerdy retainer girl, the Master's Degree scholar, and the hot bimbo in this clip), but which are pulled together under the Jenna Marbles brand. These competing representations work to speak back to and interrupt the dominant narratives of girlhood in digital spaces and beyond. (p. 84).

By negotiating with the normative ideals of YouTube, these female vloggers are constructing an alternative space of empowerment. Research has shown that this user-generated technology is a potentially empowering space for female vloggers or even for advocacy work (Horak, 2014; Miller, 2017; Maguire, 2015; Szostak, 2013; Wotanis & McMillan, 2014).

However, a research gap exists in regard to one type of female vlogger which has not been discussed extensively, that is, the housewives and mothers from large families who have been vlogging and displaying their family's every day live on YouTube. Based on my digital ethnography work on their channels, by documenting and archiving their families' everyday lives they are actually blurring the boundaries of the private and the public while contesting ideal portrayals of femininity. As most blogs focus on personal themes (Nardi et al., 2004), boundaries are distorted because vloggers invite strangers who watch YouTube into their private, domestic lives. The two channels chosen as the case studies for this article were *Jamerrill Stewart, Large Family Table* and *Parsnips and Parsimony*. The main question is how mothers from large families portray their lives in their vlogs. It aims to contribute to the scientific discussion on YouTube's female vloggers and how this video-sharing platform has been used to express new ways of portraying oneself and how an individual relates to others.

MATERIALS AND METHODS

As explained earlier, this research focused on two YouTube accounts namely *Jamerrill Stewart, Large Family Table* by Jamerill and *Parsnips and Parsimony* by Janelle. Jamerill and Janelle, the respective vloggers, were stay-at-home mothers of eight children and they both home-schooled their children as well. In their vlogs, audiences were invited to see their day-to-day activities, including

home-schooling time, grocery shopping, visits to relatives' houses or any mundane everyday activities they did around their houses. The justification for choosing these two vloggers was the identities they displayed which heavily emphasised motherhood, large families, frugal lifestyles and home-schooling in comparison with other female vloggers on YouTube. As argued by Chae (2015), contemporary motherhood was characterised by an intensive mothering ideology, comparison and competition, and these were associated with the media. Jamerill and Janelle represented not only the scrutiny of who could become the perfect mother, but also the "real" struggle of motherhood as they dealt with their eight children and chose to maintain a frugal lifestyle.

By conducting a digital ethnography of the vlogs since 2015, this analysis focused on how female vloggers controlled their self-presentation of femininity, family life and motherhood while utilising YouTube as a personal online diary. For the last 4 years, every vlog (1365 videos on *Parsnips and Parsimony* and 464 videos on *Jamerrill Stewart, Large Family Table*) had been analysed as soon as it was posted, which is a benefit of digital ethnographies in which a researcher was able to be an active observer of their vlogging activities. The main research method was content/textual analysis, as vlogs were categorised based on reappearing topics, for example, home-schooling, frugality or how they disciplined their children. After categorising the vlogs by topic, selected parts of the vlog were further analysed for self-presentations of

being a housewife/stay-at-home mother and non-idealised portrayals of a large family. The comments on each vlog and how these female vloggers responded to these comments were also analysed. Similar to conducting participant observation in ethnography, comments that drew new insights on the dynamics of the interaction between the vloggers and the commentators were interpreted in relation to the aforementioned issues. For example, one of the most repeated comments was on how well-behaved the children were. Hence, one of the issues to be analysed in this article was the vlogger's choice not to sensationalise the children's misbehaviour as a part of their agency in controlling their self-presentation.

RESULTS AND DISCUSSIONS

Presentation of the Self in Social Media

Erving Goffman's conceptualisation of self-presentation within social interactions has been used by many scholars in the fields of sociology and media studies to make sense of how an individual portrays a particular impression of him- or herself in response to an audience's expectations. By constructing this image, according to Goffman (1956), the individual has effectively projected what is expected out of them by the audience. Goffman (1956) also pointed out:

Self-presentation has different degrees, and everything depends on the social context. For example, an individual would act in a calculating manner to evoke particular responses

from the audience. Sometimes, an individual is calculating every single thing in his or her action without even realising that he or she is trying to construct particular impressions. All in all, when the individual presents himself before others, this performance will tend to incorporate and exemplify the officially accredited values of the society, more so, in fact, than does his behaviour as a whole. (p. 23).

Many scholars have argued Goffman's notion of self-presentation in everyday lives is an insightful and substantial subject of analysis; however, Psathas (1996) had criticised the lack of systemic organisation of his work even though Psathas further on explained how Goffman's work could be read in many ways. West's (1996) evaluation of Goffman mapped out his arguments in relevance to feminist studies and argued that "Goffman's legacy to this field, then, is twofold: 1) an appreciation of how power works in spoken interactions between women and men, and 2) an appreciation of mundane conversation as the means of discovering this" (p. 360). Furthermore, Goffman (1956) provided an understanding that power prevailed in everyday social settings and interactions as individuals constructed impressions to maintain social equilibrium. Within this social context, there is an ideal standard created by the powerful group; therefore, in self-presentation, one has a variety of communication techniques available for the specific purpose of fitting into the ideal standard.

Goffman's conceptualisation of self-presentation in the social stage has opened the discussion on the relationship between the audience and producers within mass-mediated social interaction (Ytreberg, 2002). Sannicolas (1997) conducted research on online relationships and how people using chat rooms portrayed themselves not as who they were but more as how they would like a potential partner to see them. However, Sannicolas also argued that this social stage was unique since there was a lack of face-to-face presence that gave the actor far greater control and the opportunity to present "the ideal self" while sustaining that presentation throughout the interaction. This is the main difference between physical interaction and interactions in media and social media, which means the idea of self-representation needs to be profoundly contextualised within the specificity of the case study.

Self-Presentation: The "Real" Housewives of YouTube

Strangelove (2010) argued that understanding how YouTube worked was significant in order to problematise the post-television (TV) era. The TV is no longer the most substantial everyday technology; amateur videos uploaded on YouTube in a more constant and profligate way have been embraced as the new medium to see the everyday reality of ordinary people. YouTube users are concerned with what is real and authentic because they watch these videos online.

In these amateur videos, creators are basically performing their day-to-day

activities and sharing what they do with the YouTube audience. A vlogger becomes a performer who regulates and controls their own appearance. As explained earlier, Goffman's approach has been used to understand the dynamic of the online presence of the self. Hogan (2010), in reference to Goffman, wrote that since an individual presented an idealised version of themselves on the social stage, the authentic self was evaluated in this conceptualisation of self-representation. In other words, particularly in social media analysis, the discussion of the "real" and "authentic" will always be problematic. Furthermore, this performance is also limited to the context of YouTube as the virtual social space.

Jamerill and Janelle were housewives who used YouTube to archive their everyday activities and presented it to the public. Both housewives were originally bloggers and ran their own online businesses from home. Jamerill had a home-schooling blog which provided free materials for other home-schooling mothers, which was the reason why she decided to open a YouTube channel in August 2010, although she had only actively vlogged since the birth of her son Daniel in 2014. According to some of her videos, particularly her country-porch chat videos, in which she sat down on her porch and talked to the camera for around 20-40 minutes explaining particular subjects or answering questions from the comments section, she stated that she wanted to help other mothers did low-budget home-schooling while living a frugal country life. Her eight children (the youngest having

been born in July 2017) were often featured in her videos. Meanwhile, her husband, Travis, was almost invisible in her videos.

Concurrently, Janelle runs several different online businesses. Besides running her blog, www.parnsipandparsimony.com, she (and her husband) used to sell things they found in garage sales on eBay. They quit eBay earlier this year as they decided to clean their house and started purging all the superfluous items while keeping only what they needed. Janelle is also a part-time Emergency Medical Technician and a consultant for Thirty-One Gifts, an online business that gives women the opportunity to run their own successful businesses selling fashionable and functional products. Her husband, Art, and seven children are often seen in her videos. Unlike Jamerill, who shares her life experience with the audience in her videos, Janelle's videos are mostly daily vlogs sharing her family's everyday activities, which means that viewers can see her children and her husband in almost all her videos.

The banners these vloggers used on their channels depict the main theme of their vlogs or what they wanted to convey to their subscribers or other audiences. The name of Jamerill's channel had changed frequently over the last few years. Initially, it used to be *Jamerrill Stewart* but in 2015, she changed

it to *The Encouraging Homeschooling Mom*. In 2016, she decided to have two channels and added a channel focusing on food and meal planning (*The Large Family Table*), while the other channel solely focuses on home-schooling. She finally decided to merge the two channels and name them *Jamerrill's Large Family Table*. In 2019, she changed her channel name to *Jamerrill Stewart, Large Family Table*. This flexibility and control over her channel, as she often reconfigures what she wants to focus on, could be read as her authority and agency in framing the way she wants to present herself (and her family).

Figure 1 showed the signifiers Jamerill used to introduce herself to her audience. She used her own photograph and not a photograph of all her children and husband. She also used the tagline "helping you feed all your people", expressing the idea of her responsibility to feed her large family, which was also reflected in the pictures of a shopping cart filled with food, kitchen utensils and a fully stocked freezer. The subjects of "food" and 'motherhood' were what was to be expected from her vlogs. As explained by Goffman (1956), individuals often foster the impression that the routine they were presently performing was their only routine, or at least their most essential one. By emphasising the representations of



Figure 1. The banner from Jamerill's YouTube channel in April 2019

food and motherhood, Jamerrill's routines as a mother manifested in cooking food for her large family and taking care of her children, became her sole identity. Therefore, the audience, in their turn, often assume that the character projected before them is all there is to the actor, which in turn constructs a particular image of what kind of mother Jamerill is in front of her audience.

The other case study, *Parsnips and Parsimony*, has been using the same name since the family first broadcast their YouTube channel in February 2014.

Unlike Jamerill, in Figure 2, Janelle used family photographs on her channel, which was updated in December 2016 when Lilian, their youngest daughter, was born. As mentioned earlier, this could be interpreted as an indication of what is to be expected from the channel. The tagline "Right Family, Wrong Century" indicates the family's tendency to lead a unique life which does not embrace modernity. In their channel, they often post frugal family financial planning because, besides home-schooling, *Parsnips and Parsimony* is a channel focusing on how to manage a large-family budget in the most frugal way. They do not follow the modern ideal lifestyle portrayed in mainstream

media. For example, they do not let their children watch TV, except the Olympics, documentaries or other educational shows. They also rear their own chickens and have a small fruit and vegetable garden where they grow produce for their daily needs. The way they run their everyday lives is more similar to the lifestyles of the pilgrims or early inhabitants of America. It is an ambiguous lifestyle where they distance themselves from modern life and yet use YouTube and the Internet as a space of social interaction and to earn some money.

In April 2018, Janelle changed her banner (Figure 3) and changed the tagline into "Celebrating family and the things that matter the most". Based on these changes, there was less emphasis on a traditional lifestyle and more on the idea of celebrating family. However, the content of the vlogs still emphasised frugality and a non-consumptive lifestyle.

Banners, for both Jamerill and Janelle, are the first impression the audience gets of their channels. When the interaction initiated by first impressions is itself merely an initial interaction, people often speak of "getting off on the right foot" and feel that it is crucial that to do so (Goffman, 1956).



Figure 2. The previous banner from Janelle's YouTube channel



Figure 3. The updated banner from Janelle's YouTube channel

These two vloggers get off on the right foot by showing their audience that they are mothers with large families who put a high priority on those families.

Jamerill and Janelle are also presenting themselves as “real” housewives, as the nature of vlogs is to capture everyday life. Self-presentation is a way to attract a particular audience, and the expected reactions are important for how the vloggers decide to present themselves. Both women are aiming to present the “real” versions of themselves as housewives. However, what they convey as “real” is already altered; they have narrowed down what the audience can watch from their vlogs. Jamerill’s focus on home-schooling, which is a result of her home-schooling website, is a construction of the parts of her life she wants to share with her audience. Janelle’s proclamation that family and “things that matter the most” are her main priority could also be seen as a form of self-presentation which limits the expectations audiences could have of her lifestyle. The next section of the article will look at how these two women are actually contesting the idea of presenting their

idealised versions, because in many of their videos, despite editing, there are moments where they focus on how their family is not ideal.

A Non-Idealised Version of a Large Family

The evolution of YouTube has transformed it into a TV-like medium. This challenges the dominant structural, economic and power relations of TV as an old form of mainstream media. In the early 2000s, reality shows, for example, became some of the most popular programmes on TV. One might argue that this reflects a craving for “reality” or the depiction of “authentic” everyday lives. After 2008, in the midst of the American economic recession, the Real Housewives franchise, which revolves around glamorous lifestyles, became one of the most popular reality programmes on TV (Lee & Moscovitz, 2013). This reality show franchise has constructed and affirmed a stereotypical portrayal of women, particularly housewives, in the mainstream media. Lee and Moscovitz (2013) stated:

Sacrificing motherhood, empathy and altruism, the rich bitch, a bourgeois feminine character done up as a cartoonish trope, pursues selfish material gains single-mindedly. Always gendered (female), always classed (leisure), and almost always racialised (white), she functions at a cultural crossroads where class antagonisms can be articulated and traditional gender roles can be reasserted. (p.65).

These housewives were portrayed as “rich bitches”, and the fact that they were in a reality show accentuated their seemingly realistic lives. A number of scholarly works have argued about the authenticity of these reality shows, mainly because most of them are scripted. I would not argue that these reality shows are parallel to my chosen case studies; however, it is necessary to contextualise the YouTube vlogs of “ordinary” American urban housewives within mainstream media representations.

Another reality show which can be compared to the two vlog case studies is *19 Kids & Counting*, a reality show about Michelle and Jim Bob Duggar and their 19 children. The show’s main appeal or even source of controversy, besides its religious discussions, is as follows (Mesaros-Winkle, 2012), “... it is relatable to anyone - regardless of religious affiliation - interested in putting family first ... Television

programmes such as *19 Kids & Counting* often contain a traditional family structure, with all other family structures portrayed as the ‘before conversion’ example of secular society” (p.68).

The representation of housewives and large families in mainstream media, which is a recent development in American society, is not exclusively introduced on YouTube because it has been portrayed by several forms of mainstream media. However, as mentioned earlier, these reality shows are scripted with sensational events and incidents. The acts presented mostly aim at attracting emotional reactions from the audience because one nature of TV is to ensure that people keep coming back for more episodes. Reality shows on TV might be showing the sensational and shambolic side of family lives to attract more viewers. In other words, the more sensational it is, the more it gives revenues to the producers and TV stations.

Jamerrill and Janelle’s vlogs represent a shift in how large-family lives are depicted in an audio-visual medium. In these YouTube vlogs, despite the editing process, messy family lives can still be seen. Both the vloggers explain that they intentionally do not show, for example, how their children misbehave. However, it is interesting to actually see that some of these misbehaviours are sometimes caught in camera and both the vloggers, who edit their own vlogs, decide to retain these scenes. The messy frame of large-family

life, in comparison with reality shows on TV, is not sensational or scandalous and is even boring at times, because it is something which could happen in almost anyone's life. However, the mundane nature of the vloggers' everyday lives with the occasional portrayal of the complexities of a large family is the main attraction that is different from reality shows. YouTube represents a transformation in the structure of our media-saturated culture. This is a transformation of who is saying what to whom, which is both simple and profound in its consequences (Strangelove, 2010). These housewives are sharing their intimate private lives and have transformed the way the complexities of American family lives could be perceived in a media-saturated culture by showing that family dynamics can no longer be sensationalised as depicted in reality shows on TV.

Both channels often share how messy their house can get and their misbehaving children. In one video, as shown in Figure 4, Janelle and Art explained to the viewers that the week had been difficult and they had been lacking sleep because Grace, their two-year-old, had been having "... a very strong will and this week have been one of those weeks when she's been a more challenging child ... so we've been putting the camera away making sure she has our full attention and that we are being consistent with what we say and what we ask of her" (Janelle, 2017). They also explained that it took them a long time to even take that short clip because of interruptions from children misbehaving.

In the middle of explaining things (14:07), Janelle and Art's faces turned stern and they looked at the right side of the camera as shown in Figure 4. At that moment, a child was playing on the computer. In another video, as Janelle was making bread with her four-year-old daughter Mary who nearly put the raw dough in her mouth. Janelle stopped her in time while saying "Art, please edit that out". However, Art decided to retain that scene.

Jamerrill, in one of her videos, also showed when her two boys, Gabriel (five) and Liam (seven), were fighting. The audience could not actually see the fight, but could hear Jamerrill describing what is happening:

They're racing back. Liam is crying at Gaby cause Gabriel's beating him. You know how it goes. Gaby won. Oh my. I was just trying to get their cute profiles. Oh my ... oh ... passionate ... passionate words coming. What do you think Amelia? Simmer down boys ... simmer down. (Jamerrill, 2015, August 12, 14:51-15:09).

The ways Jamerrill and Janelle describe their children's misbehaviour reflects the self-presentation of a good and patient parent. Instead of using words like misbehaviour or naughty, the use of subtle words or phrases such as challenging child (Janelle) and passionate words (Jamerrill). Their filming strategies, in which they intentionally avoid capturing these messy moments, can also be seen as their way of controlling the

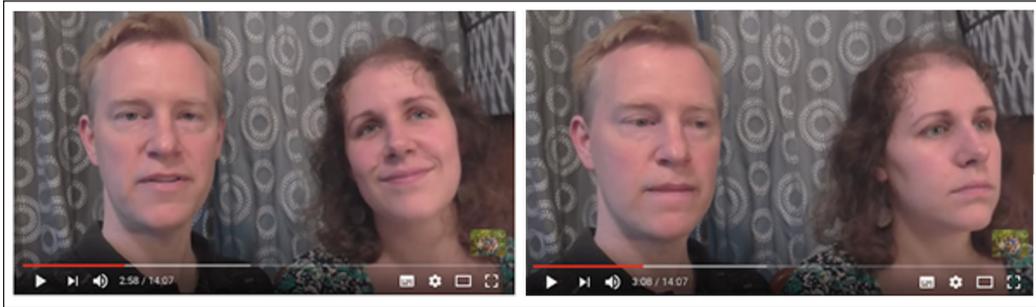


Figure 4. Janelle and Art's faces turn stern and they look at the right side of the camera (Source: Janelle, 2017, July 12, 2:58 and 3:08).

audience's gaze. If an individual is to give expression to ideal standards during her performance, then she will have to forgo or conceal action which is inconsistent with these standards (Goffman, 1956). In presenting themselves, these women do not comply with the ideal standards of being the perfect mother with perfect children. They honestly share these parenting moments. However, unlike reality shows on television, they refused to sensationalise their children's misbehaviour as a spectacle for the audience. They narrate it and tell us the story of the misbehaving children without showing us in the video. Editing becomes a significant factor since unlike physical social interactions, which are the foundation of Goffman's conceptualisation of self-presentation, digital interactions on YouTube between vloggers and their subscribers or audience members are filtered by the editing process. The editing process, which is done by the vloggers themselves, works as a blind that conceals particular actions which might not fit ideal standards. However, my research shows that these women are in control of what they decide to conceal while simultaneously not giving

in to ideal standards of perfect motherhood, leaving them with a strong sense of agency.

The Audience: Online Hostility or Reflexive Interactions

The audience on YouTube observes and monitors the self-presentation of these women, including viewers who give immediate feedback through the comment section. YouTube has also created a community and, like in every community, there will be those who do not play well with others. In the Internet world, such people are known as haters - a person who posts rude or obscene comments. As mentioned earlier, YouTube has become a social space wherein many individuals can interact in many ways. However, online hostility can also be a sign of how the boundaries between private and public lives have been blurred

In one of the vlogs (Janelle, 2017), in the comment section, a viewer had questioned aspects of Janelle and Art's parenting style. The viewer was judging them as bad parents because they asked their son to lift a heavy bag of soil from the car to the front porch that might hurt the boy's back. Due to the nature of immediate

commenting and responding to comments on YouTube, Janelle and Laura (Janelle's sister-in-law) were able to clarify things, though the viewer's opinion remained unchanged. Jamerrill also experienced some criticism of her choice of food, which is seen in her grocery shopping videos. In "Large Family \$90 Quick Grocery Outlet Haul" vlog, Jamerrill talked at length about her food choices due to previous debates in the comment section:

"I have people arguing about their food choices ... arguing about my food choices. Some of my faithful commenters or viewers get attacked because they drink milk or they don't eat meat. We just got a lot of drama going in some grocery haul videos, so I wanna come up with some sort of watching Jamerrill's grocery shopping hauls friendship creed or something. We have to come up with something like "I, by watching this video, will be kind and give each other grace. I will accept my own personal food choices and I will allow other people to accept their personal food choices. Because really, we're all just trying to give the best we can do for our family ... People get passionate about food. We all have our food choices and food opinions. And I'm also saying this because you gonna see marshmallows and Twizzlers and cake mix in this grocery haul and I know that's gonna cause some

drama, so I'm confessing my sins upfront" (Jamerrill, 2016, April 21, 01:10 - 02:18).

In other grocery shopping videos, every time Jamerill shows her full case of instant macaroni and cheese, she apologises and needs to explain her choice of food for her family. For example, in another vlog, she said, "And yes, all the moms are shaking their heads. Yes Jamerrill, it is okay" (Jamerrill, 2016, June 6, 06:45 - 06:50). In some vlogs, she called it her "emergency case of mac and cheese" that she used when her pantry and fridge were empty.

As part of her self-presentation as a mother who decides what food to serve to her family, Jamerill highlights her right to choose what is best for her family. At the same time, she also gently invites her audience to share their reactions to different opinions and views. Lange (2007) argued that online hostility from YouTube users was a product of "assumed online anonymity" and asserted that offline cultural and psychosocial contexts exacerbated online hostility. Strangelove (2010) was of the view that these social interactions in YouTube were "highly reflexive". Much reflection on the norms and ideals of the community exists, along with constant monitoring of others' behaviour.

CONCLUSION

Research findings reveal that YouTube provides alternative self-presentations of a large family living in comparison to what can be found on mainstream TV.

Unlike the formulaic narratives provided by TV and movies, vlogs offer a messier and sometimes unstructured depiction of family life, which audiences can easily relate to in comparison with reality TV. By discarding formulaic narratives, these vlogs are offering something different and are becoming an increasingly popular form of narrative, particularly if how more and more women are using YouTube for the same purpose of archiving their families' everyday lives were considered. More research can be done to contextualise this cultural phenomenon within the American social, cultural or even political situation. This research does not claim that YouTube videos are an alternative to commercially produced content because YouTube is a commercial product and ads in the vlogs form part of the commercialisation process. This can be discussed further in other research. However, amateur online videos/vlogs provide what Strangelove (2010) termed as a fresh new window inviting the audience to look at the unexpected nature of people in their everyday lives including the potential agency. These videos demand the audience's attention and stimulate curiosity in consuming a distinctive way of understanding the dynamics of motherhood and the lives of large families in America.

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The Grey Area in a Black and White World – Duality in Christopher Nolan’s Films

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ABSTRACT

Duality has been a reoccurring theme that has enticed readers and moviegoers to be enraptured by the complexities of the story and characters alike, from the pages of novels written during the Victorian Era to the silver screen. Christopher Nolan is no stranger to the idea of implementing duality into his films, adding dimensions to the characters and making the story more engaging. Even elements in the mise en scene leave much to be admired and analyzed by both audiences and scholars. This article takes a closer look at selected works from Nolan and the elements in his films that exhibit duality.

Keywords: Christopher Nolan, duality, human behavior, morality, symbolism in film

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INTRODUCTION

Films, like other forms of media, have been designed to tell stories that are filled with characters and conflict; a classic case of good vs. evil. Subsequently, this good-vs.-evil formula loses its impact when overused. To overcome the banality of this age-old-storytelling method, more dynamics were added, like the internal struggles within each character and the external battle between characters; thus duality develops.

Though directed only a handful of films for the past two decades, Christopher

Nolan's works are masterpieces in the film industry garnering profitable box office returns and critical acclaim. His style of using non-linear multi-layered narratives has cemented him as one of the foremost modern auteur directors in the current generation. Nolan's films have also delved deep into the nature of man, and the external and internal conflicts faced by man on a physical and mental level. Films like *Insomnia* (2002), *The Prestige* (2006) and *The Dark Knight* trilogy (2005, 2008, 2012) have tapped into this theme of duality to give the characters more depth and dimension to result in more engaging stories.

Thus the centerpiece of this article: taking an in-depth look at how Nolan exhibits duality through his films. Whoever takes interest in this article would also be able to draw ideas on how film language can be used to portray social themes that are reflected in real life.

Concept of Duality

The word "dual" refers to anything that is related with the number two ("Dual", 2019). This can include the fields of math and science to philosophy and psychology right down to the creative subjects of literature and art (Villiers, 2003). The concept of duality has existed for eons dating back to ancient Chinese philosophy during the third century BC with the iconic yin and yang symbol. The concept behind the black and white logo is harmony or balance between two opposing forces in life; there is always the good and the bad, then there is the bad within the good and the good within the

bad (Harikumar, 2018). The peculiar thing about the philosophy of yin and yang is that there is no clear sense of good and evil. Harikumar (2018) used a standard kitchen knife for example. The object itself is neither good nor bad, but what we do with it determines the positivity or negativity of the outcome. It is all a matter of perspective.

The study of art and literature have also turned up some very interesting topics on duality. Phillips (2017) stated that opposing viewpoints were not necessarily opposite of each other or 180 degrees apart; it was more of "90 degrees from the point of view of one, and 270 from the point of view of the other". Characters can be independent agents with their own opinions, or be part of the collective where they all ride the same boat on a particular topic. Phillips (2017) further alluded to the yin and yang symbol in Chinese philosophy; a relationship amongst characters was not just a two-way dynamic, but a highway of interconnected thoughts and emotions. Evidently, duality has become a prevalent topic in a lot of areas of research especially in the creative line.

Early Examples of Duality in Fiction

Duality in Classic Literature. The theme of duality has long been a part of literature before the emergence of the film, especially during the late-Victorian era. Here, Lauren McDonald discussed the two different perspectives of duality originally proposed by Mona Ericson: the "both/and" perspective which interrelated two conceptually distinctive ideas, and the "either/or" perspective in which "two

conceptually distinctive ideas share no middle ground” (McDonald, 2008).

The Strange Case of Dr. Jekyll and Mr. Hyde by Robert Louis Stevenson (1886) is riddled with elements of duality between Dr. Jekyll and Mr. Hyde even though both personalities inherit the same body. The references to the concept of duality from the both/and and either/or perspectives are abundant within the character of Dr. Jekyll and Mr. Hyde. Dr. Jekyll’s handsome looks accentuate his position among the upper class and appear “good” to the general public, while the ugliness of Mr. Hyde clearly reflects the ugliness of the lower class and has no qualms about appearing “bad” in the eyes of the public. However, since both the good and bad reside within the same body and the boundary between the two is blurred, it hints towards a deeper meaning that individuals are capable of being both good and evil which aligns with the both/and perspective of duality (McDonald, 2008).

The Picture of Dorian Gray by Oscar Wilde (1891/2000) is another piece of literature that tackles duality, telling the story of a man who maintains his youth by selling his soul and having a portrait of him age rather than him. The most obvious case of duality here is the struggle between good and evil that exists within Dorian. While Dorian himself is portrayed as good and the painting is depicted as evil, one can argue that both exhibit the forces of good and evil since Dorian and the painting are one in the same, or rather the portrait reflects the inner nature of Dorian. In fact, it was

common behavior during the late-Victorian era to hide one’s true nature from the public eye to avoid criticism from a society that demanded normalcy and dictated what people “ought to be like” (McDonald, 2008).

Vernon Lee’s *Dionea* is another short story that tackles the complexity of morality and questions what is right and wrong, leaning more towards the both/and perspective of duality. *Dionea* drew criticism from late-Victorian society due to their “simple-minded” idea of morals, specifically that a person can only swing one way or the other but not both, which is exactly what the main character of the same name went through (McDonald, 2008). However, modern readers are more open to the concept of duality probably due to how evolved people’s way of thinking have become.

Duality in Early Hollywood Films. Duality can also be a tool in giving more dimensions to a character in Hollywood films. One good example is Scarlett O’Hara from the movie *Gone with the Wind* by Fleming and Selznick (1939). She may come off as a spoiled, manipulative, shrewd woman who is only after men’s money, but if you look deeper, there is a sense of duality within her flaws. That is the kind of multi-dimensionality in characters that captivates audiences as highlighted by Becca Puglisi of WANA International through Lamb (2013). Scarlett’s spoiled behavior hides a certain boldness in getting what she wants; her pursuit of materialism is seen as resourceful. Cleverness can go hand in

hand with manipulation; selfishness and persistence can exist on the same page. These ideas conform to Ericson's both/and perspective of duality. Puglisi supports this theory by stating that real people have many facets with our "positive attributes having associated negative elements" (Lamb, 2013).

Most of Alfred Hitchcock's movies probe into the realm of duality like *Psycho* (1960), most notably through the character Norman Bates, who suffers from split personality disorder as revealed at the end of the movie when he is dressed as his late mother which leans towards the either/or perspective of duality. The sense of duality extends further to his drives and desires when interacting with Marion Crane. Some part of Norman wants to escape the "trap" he is in, while another part of him feels tied to his small little world or rather it is the other personality that holds Norman back, suggesting that the line between the two personalities may be blurred which coincides with the both/and perspective of duality.

There is also a sense of duality within Marion Crane. Marion steals \$40,000 from the bank she works in after overhearing a conversation about how money can buy happiness, thinking she could buy her own happiness. Though she initially had a guilty look on her face, that guilt eventually turns to satisfaction as a smile crosses her countenance. This is Hitchcock's way of expressing the conflicts within the characters as there may be some discontinuity between their natural impulses and intellect. He also

challenges the audience to ask themselves if there is morality in one's voyeurism or if there is entertainment in watching a murder (Sharma, 2012).

The trend of creating multi-layered characters and stories concerning duality have intrigued audiences and directors. Fast forward to the 21st century, another director, Christopher Nolan, has emerged and continued this trend of stories which delve into the nature of man.

METHODOLOGY

Qualitative methodology has long been associated with various researches concerning film studies. Among the different types of qualitative methods used for researching film, content analysis is one of the most common and traditional methods as it functions as a door to the various aspects of film language itself like looking into the mise en scene, narrative, editing, and sound. The concept of duality is deeply ingrained into Nolan's stories, so narrative analysis is used to look into how the story fleshes out each character's dualistic nature. Elements that are concentrated on through narrative analysis are the structure, function, substance, and performance within the story (Parcell & Baker, 2018). Things like the linearity of the narrative and the framing of a scene all play a part in drawing out the duality of the characters and the story.

Along with analyzing the narrative, there are some items or physical entities in Nolan's films that embody the spirit of duality or a marker towards the concept of duality within the story and characters.

For that, object analysis is also utilized to identify certain physical symbols related to duality. Object interpretation, like other content analysis techniques for film, are among the more traditional qualitative methodology in the field, dating back to the 1950s when Andre Bazin used the same methodology in France and later by German film theorist Siegfried Kracauer during the 1960s (Gambarato, 2010). The thing about film research of this nature is that there is no analytical model or guideline for coming up with standardized answers or deductions, making it widely open to interpretation and adding to its subjectivity. That is the beauty of analyzing film especially when trying to draw out the symbols in the film landscape. As Lefebvre (2006) put it in the words of Eisenstein, everything that was a part of a film, from the music to the setting, expresses the unexpressible through the use of cinematic form.

RESULTS AND DISCUSSION

Insomnia – The Fog Shrouding Right and Wrong

Insomnia (2002), one of the more underrated films by Christopher Nolan, is not an original film but an adaptation of the 1997 Norwegian film of the same name (Spiegel, 2017). Nevertheless, Nolan found room to put his own flavor into the remake, and it remains a highly valuable film when studying Nolan's filmmaking style, including the theme of duality. *Insomnia* tells the story of Detective Will Dormer who goes to Nightmute, Alaska, from Los Angeles to investigate the murder of a

teenage girl. What started off as a standard murder investigation, turns into a complex tale of deception when falsifying evidence and friendly fire between cops blur the line between right and wrong.

Detective Will Dormer is a fine specimen of a character that exemplifies the dualistic nature of man – how complex and double-sided their decisions may appear at times. When he first arrives in Alaska, he appears as an honorable, reputable detective met with adoration by other younger detectives. During the final act of the film, the details regarding one particular case that has been a thorn in Dormer's side are revealed. Dormer was investigating a child stalker who abducted a young boy and gave him a painful death after a hanging gone wrong. Due to lack of evidence, Dormer fabricated new evidence with the boy's blood and planted them in the stalker's apartment. However, a drop of blood spilt onto his shirt sleeve in Figure 1. This exhibits the both/and perspective of duality in Dormer's character. A figure of justice like Dormer is expected to uphold the law and do the right thing, but are his actions justifiable? Maybe not. But as Dormer puts it, "the end justifies the means", suggesting that sometimes doing the right thing requires you to do the wrong thing (Nolan et al., 2002).

Dormer's past catches up to him when he finds out his partner Hap Eckhard discloses the fact that Internal Affairs is conducting a deep investigation involving Dormer's old case, and that Eckhard cut a deal with them in order to gain some benefits. Dormer later finds himself in a bind when he has to cover



Figure 1. Dormer wiping off the blood from his shirt foreshadows the guilt that Dormer would not be able to wipe away in *Insomnia* by Nolan et al. (2002).

up his accidental murder of Eckhard while chasing after the suspect of the primary case. Backed into a corner, he is forced again to resort to false testimony of where the shooter was standing, and evidence of a fake bullet to cover his mistakes.

Things become more convoluted when the murderer Walter Finch confronts Dormer and reveals that he witnessed the whole incident between Dormer and Eckhard. Dormer is reluctantly cajoled into guiding Finch on how to tip the cops off to some other “guilty” party. Despite fulfilling his end of the deal and framing the victim’s boyfriend, Dormer is still persistent on bringing Finch to justice with the knowledge that his reputation would be tarnished once

he reveals everything about accidentally killing his partner.

The setting of *Nightmute*, Alaska itself is a representation of duality in the story. The first thing people notice is that there is 24 hours of daylight, no clear distinction between day and night like two sides of a double-sided coin. The light also represents Dormer’s conscience tearing away at his guilt over covering up the shooting of his partner Eckhard. Since the incident, Dormer covers up the blinds in his room to block out the light, and along the way further barricades the windows by taping the blinds and stacking up furniture as shown in Figure 2. Regardless, the light always finds a way through and deprive Dormer of his sleep.

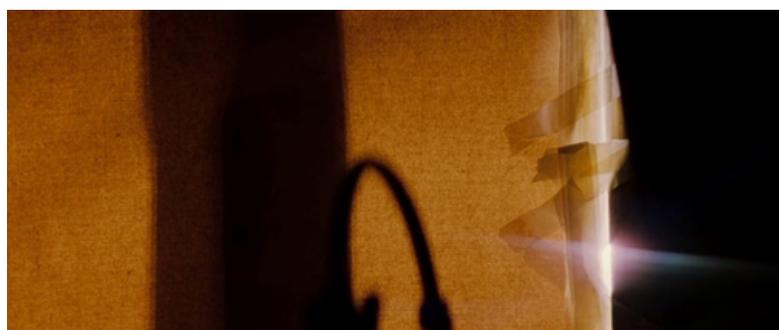


Figure 2. A glint of light seeping through the blinds and tape, a personification of the truth breaking through the barrier of lies in Nolan et al.’s (2002) *Insomnia*.

The fog during the chase scene in the forest in Figure 3 is also a metaphor for everything that happens in *Insomnia* surrounding Dormer. The lines of morality become blurred as Dormer faces the dilemma of either standing up for justice as required by his job or going against justice to protect his reputation as an officer of the law. Such is the nature of humanity where making difficult choices puts people between two fires, and *Insomnia* clearly captures that sentiment.

***The Prestige* – External and Internal Conflicts**

Magic is all about playing with the perception of the audience. Morrow (2016) pointed out Nolan's use of misdirection and manipulation in *The Prestige*, drawing people's attention to one thing at a time and then throwing them off track to leave them in constant suspense. Batty (2012) drew a similarity between a conventional film and the narrative arc of a magic trick; a film could be divided into the beginning, middle, and end much like how the magic tricks in *The Prestige* had three acts too: the Pledge,

the Turn, and the Prestige. Nolan's stylistic direction combined with themes of duality splendidly highlights the rivalry between the main characters in *The Prestige*.

The Prestige follows the rivalry between two professional magicians Alfred Borden and Robert Angier who are always trying to one up each other at their own game. After the tragic accident of Angier's wife Julia at the hands of Borden, Angier commits his life to ruining Borden. His obsession takes him all the way from London to Colorado to meet with Nikola Tesla and commissions him to build a special machine. Equipped with his new tools, Angier prepares for one last magic showdown in London against Borden.

There is a lot to dissect when it comes to the exhibits of duality in *The Prestige*. First is the relationship between Angier and Borden. At first glance, they are two very different individuals with contrasting backgrounds – Angier is from the aristocratic class while Borden is from the lower class. But when it comes to the conflict between the two protagonists, they are more alike than different. Both attempt to sabotage each



Figure 3. The fog in this scene acts as a metaphor for how blurred the lines of morality are in Nolan et al.'s (2002) *Insomnia*.

other's work through the use of disguises. And during the second act of the film, both Angier and Borden try to one up each other on the same trick – The Transported Man. This obsession with rivalry goes to show that even members of different classes can behave so indifferently. Even Olivia, the assistant who served Angier but later switched to Borden, tells Borden during the second half of the film that he and Angier “deserve each other”, suggesting that Borden and Angier are not so different after all (Nolan et al., 2006).

The trick The Transported Man itself is also a construct of duality. The way the trick works is a man goes into one box and appears in another box with the help of a small object and a double. Angier's improved version of the trick with the help of Tesla's machine takes things even further as it has the ability to create an actual double out of nothing over a very long distance. The risky part for Angier is the uncertainty of where his consciousness might lie after the double has been created. Whether his mind has been transferred or merely duplicated is a question not even Angier nor the film audience can answer.

Tesla's machine also has an air of duality surrounding it. Tesla makes an astounding comment about society's attitude to change. Society is amazed by only one change at a time, but when too many occur within a short time frame, amazement turns to fear (Nolan et al., 2006). The same thing can be said of Tesla's and Angier's field of work, and the machine's contribution to each field, as explained in Tesla's farewell

note to Angier: “The truly extraordinary is not permitted in science and industry. Perhaps you'll find more luck in your field where people are happy to be mystified” (Nolan et al., 2006). The phrase “one man's meat is another man's poison” seems apt in describing the irony of how Tesla's machine can either bring smiles to the realm of entertainment or frowns to the world of science.

While the rivalry between Angier and Borden illustrates the external dualistic conflict, there is also the internal conflict that exhibits a sense of duality. As established at the end of the film, Borden has been using a double all along, only he brings this sense of duality to every aspect of his personal life. Borden and his double dubbed Fallon throughout the entirety of the film have been constantly switching places with each other to preserve the secrets of the trick. This surreptitious practice goes as far as one of them in love with Sarah the wife and the other in love with Olivia the assistant. Even the character of Borden alone develops a second stage persona under the name of Freddie the Professor once he started gaining popularity with the help of Olivia.

Borden's relationship with Sarah and Olivia also suffers from this dichotomy. Sarah has a sixth sense of telling whether Borden's love for her is either genuine or fake; she claims it helps to keep things honest between them. Once Olivia comes into the picture, one of the Borden doubles becomes smitten with her and brings her into the web of duality already set, putting undue stress on Sarah. Sarah eventually

falls apart from having to face Borden's "inconsistent" love for her, resulting in her suicide in Borden's magic workshop. That scene of Sarah dangling from the neck in Borden's workshop speaks volumes about how Borden's dedication to magic, in keeping the whole dual act, brings about suffering for those around him.

On the subject of identities like Borden's Freddie and Angier's The Great Danton, Badjugar (2016) referred to ancient philosophy in order to explain how Borden and Angier attempted to achieve the impossible by creating an alternate identity. There is some truth in relying on duality to achieve greatness due to the fact that Borden would never have been able to pull off *The Transported Man* all by himself, but with the help of his double to pull off the trick, Borden made the impossible possible.

Borden and Angier touch on the sacrifices made for their work. Like Badjugar covered before, Borden's double helped him to achieve the impossible, but in order to keep *The Transported Man*'s secret alive, Borden had to sacrifice all sense of a normal life; have himself and his double share one life just to make sure no one catches on. Angier's argument for his sacrifice, though Borden does not buy it, is having to step into Tesla's machine every night creating a clone, not knowing if he would be "the man in the box or in the prestige" (Nolan et al., 2006). While both have different opinions on the meaning of sacrifice, the either/or perspective of duality, what their so-called sacrifices have in common is that the lives around them are destroyed – even

each other's. Thus their sacrifices can also be considered to be a both/and perspective on duality since they have similar effects on others.

O'Connell (2017) threw in a theory about Tesla's machine. If the machine had the power to create a clone of anything that entered the machine, why did Angier not create a single clone? Why the need to put a water tank under the stage and "drown himself" every night? For this, O'Connell points to what Cutter, the ingenieur who mentors both Borden and Angier, says during Julia's funeral. Cutter says that drowning is a bit like "going home", although later at the end of the film, Cutter reveals that he lied and that drowning is "agony" (Nolan et al., 2006). Angier wants to feel that agony, but at the same time, he wants to "go home" to be together with his wife. Badjugar (2016) added to this by saying that since Angier's wife drowned at the hands of Borden, Angier's drowning also serves as some kind of repetitive justice for Borden. This is not the only evidence of repetitive justice in *The Prestige*. Sarah's suicide by means of hanging also comes back to bite Borden when he himself is tried for Angier's "death" and sentenced to hang until dead as shown in Figure 4 and Figure 5. It is almost poetic how justice comes in twos in *The Prestige*.

The Dark Knight – The Mask or the Face
 Superheroes are great examples of duality since they have two sides to their identity: the hero and the normal man; also the battle between good and evil that they are constantly involved in. But no superhero



Figure 4. Borden's wife Sarah hanging in his workshop in Nolan et al.'s (2006) *The Prestige*.



Figure 5. Borden's sentence by hanging in *The Prestige* by Nolan et al. (2006).

tale exemplifies the concept more than Christopher Nolan's *The Dark Knight* from *The Dark Knight* trilogy.

Bruce Wayne aka Batman is a billionaire playboy by day, and a vigilante by night. Nolan tackles that particular theme on a whole other level by examining which is the mask and which is the face, bringing the both/and perspective of duality into the picture. At the end of the previous film *Batman Begins*, Bruce comes to terms with the fact that the persona of Bruce Wayne is the "mask" to hide his "real identity" as protector of Gotham (Nolan et al., 2005).

Fast forward to *The Dark Knight*, Bruce still struggles with the knowledge that Gotham still needs Batman. With the

entrance of Harvey Dent acting as the new District Attorney and bringing his own brand of justice to the criminals, Bruce clings on to the hope that he can relieve himself of the Batman persona. Unfortunately, that proves to be more complicated than anticipated with Batman's nemesis The Joker taking center stage wreaking havoc on everything, and bringing down what Batman and Harvey are trying to accomplish. In the end, Bruce has to continue to embrace the role of Batman a little longer.

The either/or perspective is written all over the relationship between Batman and The Joker even in the comics before the making of this film. There is a reason why The Joker is described as Batman's

archenemy by both the fans and the creators due to their contrasting personalities and outfits; polar opposites of one another. One of the producers of the classic *Batman: The Animated Series*, Burnett (2004), stated that The Joker was “the perfect Batman villain because he is the antithesis of Batman”, having no historical connection other than to oppose everything that Batman stands for.

The way Nolan portrays these two characters fit in perfectly with the mythos already present. The Joker has no motive or laid out plans and destroys everything in his path; he just “wants to watch the world burn” (Nolan et al., 2008). Throughout *The Dark Knight*, The Joker has always attempted to throw Gotham to the brink of chaos and force Batman to cross the line of his own moral code. One instance is probing Batman to knock him down on his Batpod only for Batman to swerve out of the way at the last instance. There is also the final confrontation between Batman and The Joker in an abandoned building where Batman throws The Joker off the roof, only to catch him halfway and string him up with his grappling gun. This is where The Joker realizes that Batman is truly “incorruptible”, always saving Gotham without sacrificing his personal code of conduct.

Then there is the famous interrogation scene between Batman and The Joker in the police station. Here the Joker talks philosophy with Batman about how ugly human beings really are; willing to “eat each other” when things go south, and how they will only need others when necessary after which they are “cast aside like a leper”

(Nolan et al., 2008). The Joker even touches on Batman’s so-called role as a hero; no matter how hard he tries or how much he does for Gotham, Batman will always be looked upon as a freak like The Joker, suggesting that Batman and The Joker are more to being on the same side of a coin instead of opposing sides.

The cinematography also captures the dualistic nature being referred to here. Wally Pfister, the recurring director of photography in most of Nolan’s films, does a good job of shifting the position of Batman between the right and left of the frame in order to highlight The Joker’s points. There is a certain psychology that is associated with the movement of the camera and the position of characters in film. A study done at Cleveland State University (Egizii et al., 2018) found that lateral movement from the left to the right is easier on the eyes and minds of audiences, and how most filmmakers have a tendency to lean towards left to right movement over right to left since it feels more natural. Characters on the left side of the frame looking or moving to the right exhibit more positive energy, maybe even heroic (Egizii et al., 2018). And that is where we see Batman in the beginning of the interrogation scene in Figure 6. But as the conversation drags on, we notice a shift in Batman’s position to the right of the frame looking left in Figure 7 suggesting that there may be some antagonistic aspect to Batman’s nature despite his heroic deeds as protector of Gotham as pointed out by The Joker.



Figure 6. Batman on the left of the frame looking right towards the Joker in Nolan et al.'s (2008) *The Dark Knight*.



Figure 7. Batman's position changes to the right of the frame looking left in *The Dark Knight* by Nolan et al. (2008).

The antagonistic side arises later in the interrogation when The Joker pushes the right buttons by taking Bruce's love interest Rachel hostage, forcing Batman's hands on The Joker. This supports The Joker's twisted goal of corrupting Batman and pushing him to his mental limits, proving that no matter how much good Batman does for Gotham, eventually it will show that he and The Joker are one in the same.

This concept is a nice segue into the next part about Harvey "Two-Face" Dent, the district attorney who has dedicated his career to combating corruption and crime in Gotham only to fall into it himself. Harvey Dent, unlike the dark knight of Gotham, is considered the white knight of Gotham,

hardly needing a mask and stepping into the limelight of the courtroom and the press to take on the criminal underworld. So Batman and Harvey Dent represent the duality of the fight against justice, one doing things by the book and the other resorting to more outlawed tactics.

Dent does bring up another sense of duality in heroes at the beginning of *The Dark Knight* where he says: "You either die a hero or you live long enough to see yourself become the villain" (Nolan et al., 2008). Through this statement, Dent forebodes the struggles the heroes have to go through. We have already seen Batman being pushed to the limit by The Joker nearly crossing the line at some points

during the film, but Dent himself also faces that dilemma throughout the film.

A good place to observe this behavior in Dent is when he steals an ambulance carrying one of the assassins of the mayor of Gotham and drives out to the middle of an abandoned alley to interrogate him. As much as he wants to shoot the assassin for what he has done, he instead leaves it up to his coin. However, due to the coin being double-headed, Dent never actually pulls the trigger but merely fools the assassin into giving up the location of The Joker. So the coin acts as a barrier keeping Dent from crossing the line, and as a symbol for the “goodness” in Dent. Once Dent gets caught in the explosion caused by The Joker, not only is half his face burnt but also half his coin is burnt; thus, the line separating good from evil is broken and the downfall of Harvey Dent begins as he turns into the villain Two-Face.

The Joker convinces Dent to take a darker path by making the argument that even though he himself has done some very inhumane things, he is simply acting according to nature without a plan and that the higher officials like the mayor, the politicians, and even Commissioner James Gordon “have plans” and love to scheme for their own ulterior motives (Nolan et al., 2008). Even criminals have plans, suggesting that there is not much difference between the figures of society. In other words, the figures of society are actually worse than the biggest criminals in Gotham which supports McDonald’s earlier statement about how human beings

are capable of both good and evil, coinciding with the both/and perspective of duality.

What The Joker proposes is that Dent “introduces chaos to society” which is ironically “fair” (Nolan et al., 2008). That is where everything is stripped bare and made simple in twos. Dent has become the very thing he has fought against for so long, and has proven that heroes eventually live long enough to see themselves become the villain. That is until Batman ends him and takes the blame in order for Dent’s reputation to go untarnished; thus, all he has done for the city would not be in vain. So Batman ends up becoming a villain in the eyes of Gotham, though he is also a hero, albeit a dark one, to those who know what really transpired.

It should be noted that it is not just the main characters that exhibit duality, but even the citizens of Gotham showcase the complex nature of man. A prominent time when the morality of people is questioned is when The Joker gives each ferry at the harbor the bomb detonator to the other. What is interesting here is the occupants of each ferry: one ferry is composed of the upright or law-abiding citizens of Gotham while the other harbors the prisoners, the law-breakers, of Gotham.

There is a concept in psychology known as the fundamental attribution error in which people concentrate more on the personality of others rather than the gravity of the situation itself (Grinnell, 2016). With their lives placed on the line, all rational thought gets thrown out the window; and the civilian passengers insist on blowing

up the ferry with convicts before they get blown up by them. After all, being criminals, they “had their chance” and might not think twice about blowing civilians up. So far, the regular citizens have proven that they are “as ugly as The Joker” capable of nefarious deeds. Although as time passes, the awareness of the situation becomes more apparent on both ferries as neither has chosen to blow the other one up. One particularly brutish-looking convict takes the detonator and throws it into the lake, claiming that this is what everyone “should have done 20 minutes ago” (Nolan et al., 2008). This is a textbook example of “not judging a book by its cover”; just because someone has a lot of tattoos with a scar on

his face and is wearing a prisoner’s garments does not mean he is not capable of remorse or good deeds.

Another thing to note is how Wally Pfister again plays with the framing of the scene. Figure 8 shows the convict who eventually throws the detonator into the lake standing on the right of the frame looking left, while Figure 9 shows the citizen who picks up the detonator also standing on the right of the frame looking left. The symbolism behind this is that while they are of different status in society, they both have some sense of negativity surrounding them; the convict exhibits it externally while the citizen embodies it internally.



Figure 8. The burly convict who throws away the detonator on the right of the frame looking left in *The Dark Knight* by Nolan et al. (2008).



Figure 9. The average citizen who volunteers to “get his hands dirty” on the right of the frame looking left in *The Dark Knight* by Nolan et al. (2008).

CONCLUSION

The study of duality has been a longstanding one in many fields of study whether it involves numbers or words. While there may not be much to contribute to the subject itself, the way that the theme of duality is tackled in the numerous pieces of literature and films leave a lot to be admired and open to analysis and interpretation. Implementing duality into the stories of films adds more complexity to the characters and more layers to the story.

Christopher Nolan has implemented duality in his films in a variety of ways. In *Insomnia*, he uses the environment like the fog and sunlight as symbols to reflect the duality in certain situations. He also inserts external and internal conflicts in *Memento* to give more depth to the two main characters on top of the constant duel they are in. Last but not least, Nolan gives more depth to the well-established Batman mythos in *The Dark Knight* by exploring the duality within and surrounding the characters along with brilliant cinematography to flesh out the themes and symbols. Nolan's films have proven that with duality, the world within the film is taken to a whole different level by adding complexities to the characters and twists to the story. Such practice has allowed not only Nolan but other directors to make the plot of their films more engaging, just like authors in the past have done with their novels.

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Relationship Between Neurological Threshold in Sensory Profile, Depression, and Anxiety among Adults

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ABSTRACT

Depression and anxiety are among the most prevalent psychological difficulties in adults. The aim of this study was to explore the relationship between neurological threshold in sensory profile, depression, and anxiety. Three hundred fifty-four healthy adults in the age group of 20 to 45 years old completed PROMIS[®] Depression and PROMIS[®] Anxiety questionnaire and Adolescent/Adult Sensory Profile[®]. Data were analyzed through Pearson Correlation. The findings showed that there was a significant positive relationship between low neurological threshold and anxiety ($r=.381$) and depression ($r=.295$). Furthermore, there was a significant positive relationship between high neurological threshold and anxiety ($r=.115$). However, the relationship between high neurological threshold and depression was not statistically significant. We can conclude that individuals' neurological threshold based on sensory profile might be considered as one of the factors relating to anxiety and depression. This study has implications for mental health professionals and it is recommended to study this component more deeply in future studies.

Keywords: Anxiety, depression, neurological threshold, sensory profile

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INTRODUCTION

Depression and anxiety are among the most common psychological issues in adults that affect their lives and performance (National Collaborating Centre for Mental Health, 2011; Petrie et al., 2019). Also, in a World Health Organization project as World Mental Health Survey among international college students, it was stated that depression and

anxiety are among the most prevalent mental health problems among adult students (Auerbach et al., 2018). These prevalent psychological problems may cause impairments in adults functioning and decline job performance and increase work participation (Steel et al., 2014). As such, depression and anxiety, not only affects individuals' lives, but also it causes social, functional, and financial issues to the societies as well (Organisation for Economic Co-operation and Development, 2012; Seymour & Grove, 2005).

Considering the prevalence and effects of depression and anxiety, it is essential to explore the possible factors that relate to them. Although there is limited evidence available that depression and anxiety are explored from the perspective of sensory processing patterns (Engel-Yeger & Dunn, 2011a; Engel-Yeger et al., 2016; Khodabakhsh et al., 2016a), but still it is unknown how they relate to the sensory processing patterns that represent high/low neurological thresholds in sensory profile. Therefore, the aim of this study was to explore the relationship between neurological threshold in sensory profile, depression, and anxiety among adults.

According to Dunn's sensory model (Dunn, 1997), individuals' sensory profile indicates their sensory processing pattern. In general, sensory processing is the way that the nervous system receives and understands the sensory stimuli from the environment and inside the body, which causes the person to react to the environment (Humphry, 2002). Several studies showed

that extreme sensory processing patterns cause difficulties for individuals to carry out adaptive responses to the environmental sensory stimuli for the situational demands (Bodison & Parham, 2018; Soto et al., 2017).

The two components of sensory profile are neurological threshold and behavioral responses. People may have low or high neurological thresholds and passive or active behavioral responses (Brown & Dunn, 2002). The required amount of stimuli for a neuron or neuron system that can make it respond is called the neurological threshold. At one end of this continuum, thresholds are extremely high; this says it needs a high level of stimulus or many stimuli to reach the threshold and fire the neurons. At the other end of this continuum, thresholds are extremely low; this says it requires a low level of stimulus or very little stimuli to reach the threshold and fire the neurons. Those with higher thresholds would not notice stimuli, while those with lower thresholds would notice many stimuli (Brown & Dunn, 2002).

In this study neurological threshold is the total score that the participants get in their sensory profile, which is developed based on Dunn's (1997) model of sensory processing. In sensory profile, 30 items represent high neurological threshold and 30 items represent low neurological threshold (Brown & Dunn, 2002). In this study, depression and anxiety levels were defined by the total score that participants get from the PROMIS® Anxiety and PROMIS® Depression questionnaires.

According to a study among thirty-five healthy adults, Engel-Yeger and Dunn (2011a) stated that state anxiety and trait anxiety might be related to extreme sensory processing patterns. Moreover, according to the study by Engel-Yeger et al., (2016) among adults with major affective conditions, results showed that depression and anxious/cyclothymic affective temperaments were predicted by extreme sensory processing patterns of sensitivity and sensory avoiding.

Serafini et al. (2017) studied sensory processing patterns among 281 euthymic participants and they found that extreme sensory processing patterns, impulsivity, depression, and hopelessness might show a characteristic pattern in patients with major affective disorders. They stated that higher sensory sensitivity and sensory avoiding, and lower registration of sensory input was correlated with depression (Serafini et al., 2017).

Ahadi and Basharpour (2010) explored the relationship between sensory processing sensitivity, personality dimensions and mental health among university students. Their study results revealed that ease of excitation, which was linked to low neurological threshold, was positively correlated to mental health in aspects of anxiety, disorder in social functioning, and depression. They stated that sensitivity was positively related to anxiety. In their study, low sensory threshold was also positively related to neuroticism, physical problems, anxiety and mental health (Ahadi & Basharpour, 2010).

Besides, several studies in sensory field discovered relationships between some of the psychological issues and intense sensory processing patterns (Ben-Avi et al., 2012; Schaaf et al., 2015; Tomchek et al., 2015). Also, some studies revealed that there is a significant relationship between sensory processing and some of the personality traits, and affects such as depressive mood (Engel-Yeger & Dunn, 2011b; Khodabakhsh et al., 2016b; Kimball et al., 2012).

In a study among 210 college students, Liss et al. (2008) explored the relationships between the three factors of sensory processing sensitivity (ease of excitation, low sensory threshold, and aesthetic sensitivity) and alexithymia, autism symptoms, anxiety, and depression. They found that ease of excitation and low sensory threshold were related to anxiety, depression, autism symptoms, and alexithymia. Khodabakhsh et al. (2016a) also reported a significant relationship between sensory processing patterns and anxiety. In their study among university students, the results indicated that there was a significant positive relationship between the three patterns of sensory processing and anxiety, including sensation avoiding, sensory sensitivity, and low registration. Moreover, they stated that sensory avoiding and sensory sensitivity, which were the two sensory patterns with low neurological threshold, were significant predictors of anxiety (Khodabakhsh et al., 2016a).

According to the mentioned studies, individuals' sensory processing patterns, specifically patterns that include low level of

neurological threshold, experience a higher level of depression and anxiety. Based on the above matters, this research hypothesis were as follows:

1. There is a significant relationship between neurological threshold in sensory processing patterns and anxiety.
2. There is a significant relationship between neurological threshold in sensory processing patterns and depression.

METHOD

Participants and Sampling Procedure

Three hundred and fifty four healthy adults participated in this study. The sampling was done among students at the University of Malaya in Kuala Lumpur, Malaysia. As exclusion criteria, students who had past diagnosed mental disorder or illness and taking any daily medicine were excluded from the sample. The multistage random sampling was applied and from the university, five faculties were chosen randomly including Faculty of Language and Linguistic, Faculty of Science, Faculty of Computer Science and IT, Faculty of Engineering, and Faculty of Education. The classes and laboratories were selected randomly from each of the selected faculties. The data collection was done from 1st October 2014 for one month.

Instruments

To measure high or low neurological threshold, the Adolescent/Adult Sensory

Profile[®] (AASP) (Brown & Dunn, 2002) was used. There are 60 items in this self-report questionnaire and it is based on Dunn's (1997) model of sensory processing. In general, 30 items represent high neurological thresholds and 30 items that represent low neurological thresholds. In this study, the score for high or low neurological threshold is the total score retrieved from the related items for each of them. In this questionnaire, a five-point Likert scale is used to rate the responses for each item (from 1 = almost never to 5 = almost always). Therefore, the score for low or high threshold ranges from 30 to 150. Based on previous studies, the internal consistency of this instrument is considered as good with alpha values from 0.63 to 0.82 (Brown & Dunn, 2002; Brown et al., 2001; Pearson Education, 2008). In a study among university students, Khodabakhsh (2016) reported the internal consistency of Adolescent/Adult Sensory Profile[®] as 0.83. In this research, we bought the original instrument and we obtained permission to use the AASP the copyright holder/publisher.

PROMIS[®] Anxiety Questionnaire is an instrument that includes items related to self-report fear, anxious misery, hyperarousal, and arousal somatic symptoms (Pilkonis et al., 2011). The PROMIS[®] anxiety questionnaire contains 29 items with a seven-day period and a five-point scale (from 1 = never to 5 = always). So, the total score in this questionnaire ranges from 29 to 145. In this study, the anxiety score is the total score that the participant gets from the questionnaire. A study reported that

PROMIS® Questionnaire had acceptable psychometric characteristics (Pilkonis et al., 2011). In a study among university students, Khodabakhsh (2016) reported the internal consistency of PROMIS® Anxiety Questionnaire as .94.

PROMIS® Depression Questionnaire is a self-reported questionnaire that includes items such as increased negative mood, reduced positive affect and engagement, and views of self and social cognition (Pilkonis et al., 2011). The Diagnostic and Statistical Manual of Mental Disorders – DSM has considered PROMIS® Depression as an instrument to recommend for assessing the depression (Kuhl et al., 2011). We used the full item bank of PROMIS® Depression questionnaire that contains 28 items in a seven-day period and a five-point scale (from 1 = never to 5 = always). So, the total score in this questionnaire ranges from 28 to 140. In this study, the depression score is the total score that the participant gets from the questionnaire. In a study among university students, Khodabakhsh (2016) reported the internal consistency of PROMIS® Depression Questionnaire as .94.

Besides, the Demographic Questionnaire was designed to collect demographic information of the participants in terms of their age, gender, marital status, nationality, medical history, psychiatric history, and taking psychiatric medication.

Procedure

Ethical approval for this study was received from the University of Malaya to conduct the research. The informed consent forms

were provided for participants to read and sign before participating in the study. In the consent form, it was mentioned that their information would be kept confidential.

We used the Pearson Correlation method to investigate the relationship between neurological threshold in sensory processing patterns, depression, and anxiety in participants.

RESULTS

After collecting and screening the data considering the exclusion criteria, we found that according to the demographic questionnaire, the participants' age was between 20 to 45 years old and the mean age was 29.68 years ($SD = 5.42$). From the participants, there were 244 (68.9%) males, and 110 (31.1%) females. It showed that 230 participants (65%) were single, 117 participants (33.1%) married, four participants (1.1%) divorced, and three participants (0.8%) in other marital status that included separated (1 student) and engaged (2 students).

Regarding the participants' nationality, it was revealed that they were from 24 different nationalities and all of them knew the English Language at a proficient level following the university requirements. The number of students from each nationality and the valid percent of them in the sample were in this order from highest percent to lowest: Iranian 70 (19.9%), Pakistani 43 (12.3%), Indonesian 40 (11.4%), Bangladeshi 39 (11.1%), Chinese 30 (8.5%), Iraqi 30 (8.5%), Nigerian 26 (7.4%), Indian 23 (6.6%), Sudanese 13 (3.7%), Japanese

6 (1.7%), Yemeni 6 (1.7%), Syrian 4 (1.1%), Saudi Arabian 4 (1.1%), Philippine 3 (0.9%), Bruneian 3 (0.9%), Libyan 3 (0.9%), Omani 1 (0.3%), Maldivian 1 (0.3%), Palestinian 1 (0.3%), Zimbabwean 1 (0.3%), Thai 1 (0.3%), Burmese 1 (0.3%), Tanzania 1 (0.3%), and Cameroon 1 (0.3%).

Table 1 shows the descriptive statistics of the variables of this study.

As it is shown in Table 2, regarding the first hypothesis of the research, the results indicated that there is a significant positive relationship between anxiety and low neurological threshold in sensory processing patterns ($r=0.381$). Also, the results showed that there is a significant positive relationship between anxiety and

high neurological threshold in sensory processing patterns ($r=0.115$). Besides, according to the results, the relationship between low neurological threshold and anxiety is stronger than the relationship between high neurological threshold and anxiety.

The results regarding the second research hypothesis is shown in Table 3, which indicates that there is a significant positive relationship between depression and low neurological threshold in sensory processing patterns ($r=0.295$). However, the relationship between high neurological threshold and depression was not statistically significant.

Table 1
Descriptive statistics of variables of the study (N=354)

	Minimum	Maximum	Mean	Std. Deviation
Anxiety	31.60	70.30	53.34	7.45
Depression	38.00	68.00	52.71	6.05
Low Neurological Threshold	40.00	111.00	77.19	14.00
High Neurological Threshold	42.00	107.00	77.21	10.62

Table 2
Pearson correlation between neurological threshold in sensory profile and anxiety (N=354)

	Anxiety	
	Pearson Correlation	Sig. (2-tailed)
Low Neurological Threshold	0.381**	0.000
High Neurological Threshold	0.115*	0.031

Table 3
Pearson correlation between neurological threshold in sensory profile and depression (N=354)

	Depression	
	Pearson Correlation	Sig. (2-tailed)
Low Neurological Threshold	0.295**	0.000
High Neurological Threshold	-0.002	0.968

DISCUSSION

The results of this study are consistent with the findings of Ahadi and Basharpour (2010). As their study showed, there was a positive relationship between sensory processing sensitivity and mental health among university students. They specifically mentioned that ease of excitation, which was the feeling of being overwhelmed by both external and internal demands, positively correlated to mental health in aspects of anxiety, depression, and disorder in social functioning. They stated that sensitivity was positively related to anxiety. In their study, low sensory threshold was also positively related to neuroticism, physical problems, anxiety and mental health (Ahadi & Basharpour, 2010). In line with this study, Liss et al. (2008) found that ease of excitation, low sensory threshold, and aesthetic sensitivity, as the three factors of sensory processing sensitivity, had a positive relationship with depression and anxiety. By considering their findings and the current study results, it might be possible that having lower neurological threshold may be a substantial factor for the experience of anxiety in adults.

Also, the result is in line with the findings of Engel-Yeger and Dunn (2011b) who found strong correlations between anxiety and the sensory patterns with low neurological threshold. In this study, low neurological threshold showed a higher correlation with anxiety level compared to high neurological threshold. Besides, as Benham (2006) found, highly sensitive people experience a higher level of anxiety

and high sensory processing sensitivity was associated with greater perceived stress and more frequent symptoms of ill health (Benham, 2006). In another study, individuals reported their anxiety related to their sensitivity to environmental stimuli (Neal et al., 2002). Pfeiffer and Kinnealey (2003) reported a relationship between sensory defensiveness and anxiety, too. According to Beck's model (Beck, 1979), defensiveness is one of the cognitions that underlie anxiety and harm avoidance is what anxious people are struggling to achieve.

In Beck's cognitive psychopathology model (Beck, 1979), cognitive schemas related to danger and harm to personal well-being is underlying the experience of anxiety. Anxious individuals mentally focus on danger and harm because of the activation of the maladaptive cognitive schemas, leading them to indiscriminately interpret any environmental events as being dangerous. According to this cognitive model, people tend to exaggerate and enlarge the extent of the danger that they may feel in fearful situations. That is the reason that they feel danger and harm even if the input is very less dangerous and harmful. Considering Beck's cognitive model of psychopathology for anxiety, individuals with low neurological threshold are receiving most of the stimuli from their environment because of their low thresholds. They can notice even the small amount of stimuli. Therefore, they may more feel themselves at the target of harm or danger.

In this study, the relationship between high neurological threshold and anxiety was also statistically significant. But the strength of this relationship was less than the relationship between low neurological threshold and anxiety. People with high neurological threshold may feel less danger from the environment, as they do not notice some of the stimuli in their environment because of their high threshold. Hence, they find themselves in overwhelming or uncontrollable situations less than individuals with low neurological threshold.

According to the results of this study, the relationship between neurological threshold and depression was significant. This finding was reported in previous studies by Kimball et al. (2012), Engel-Yeger and Dunn (2011b), and Liss et al. (2008), as these researches reported a positive relationship between sensory sensitivity and negative affect and depressive symptoms.

People who are more sensitive to what happens in their environment regarding their sensory experiences may show depressive symptoms as well (Aron et al., 2005; Brindle et al., 2015). Also, depression has also a positive correlation with ease of excitation and low sensory threshold which are characteristics of sensory sensitivity (Liss et al., 2008).

The result of this research is in line with the outcomes of prior researches that reported the association between symptoms of ill health and high level of sensory sensitivity (Benham, 2006). Moreover, this result is the same as the finding of Pfeiffer et al. (2014) which stated the correlation

between the reduced quality of life and increased sensory sensitivity.

The findings of this study can be discussed from the cognitive theory perspective, too. Based on the cognitive model of psychopathology in Beck's cognitive model, individuals obtain dysfunctional beliefs if they do not process internal or external information without any bias (Beck, 1979). On the other side, if a person has low neurological threshold, he or she may experience being overwhelmed in the majority of circumstances. It happens to them due to receiving countless stimuli from their surroundings. This may make them to blame themselves and to make them think negatively about themselves. They may refer the cause of this overwhelming experience to themselves and believe deficiency in their coping abilities, which are some of the underlying causes of depression based on the Beck (1979) cognitive model of psychopathology.

Considering the mentioned studies, factors that represent low neurological threshold, such as ease of excitation and sensory sensitivity, are related to depression and anxiety. Also, extreme sensory processing patterns can cause psychological difficulties such as depression and anxiety, too. In the current research, we focused on the neurological threshold in individuals' sensory profiles. From this perspective, depression and anxiety had a positive relationship with a high/low neurological threshold. In other words, it seems that as the neurological threshold in sensory profile goes to the extremely low or the extremely

high level, the anxiety and depression level also increases. This study needs deeper investigations on the neurological threshold perspective to depression and anxiety.

CONCLUSION

This study was an attempt to explore depression and anxiety from the perspective of neurological thresholds in sensory processing patterns. As the finding showed, depression and anxiety may be related to the neurological threshold as linked in sensory patterns of people. The result of this study may provide implications for professionals in the mental health field, such as psychologists and counselors.

It is recommended that future studies explore neurological threshold in individuals with clinical anxiety and depression. Conducting a mixed-method study, which is conjoining the quantitative instrument and interview, will be helpful. Using other instruments to investigate low or high neurological threshold is recommended.

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Impact of Work Values in Promoting Organizational Citizenship Behavior Among Academicians: The Mediating Roles of Job Satisfaction

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ABSTRACT

Organizational citizenship behavior (OCB) has become an increasingly important aspect in improving organizational performance, employees' work attitude and behavior. However, research that focuses on work values, work attitude and OCB is still limited specifically in higher education institution (HEI) setting. Higher education workers particularly academicians at present portray a high individualistic culture with lesser OCB due to a great pressure and demand existed in the setting. This paper aims to investigate how certain work values promote academicians' organizational citizenship behavior and highlights the role of job satisfaction as a mediator between the aforementioned relationships. Work values in this study were looked at two aspects of terminal and instrumental. Meanwhile, OCB was looked at into two aspects namely OCB towards individual (OCBI) and organization (OCBO). This study population involved 460 academics retrieved from both private and public HEIs which were used a structural modelling approach in testing the hypotheses. The findings revealed that work values significantly predicted OCB. Both terminal and instrumental work values have a significant influence on academics' degree of OCB. Job satisfaction on the other hand mediates the relationship between terminal work values

and OCB. The implication of this paper related to theoretical, empirical and policy advancement in relation to OCB at work was included.

Keywords: Job satisfaction, organizational citizenship behavior, work values

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INTRODUCTION

Academicians have long been acknowledged as the university's backbone in striving for rating and performance. However, due to greater demand, academicians at present face a constant pressure in terms of mounting workload and high demands. Academicians today are not only responsible for teaching and learning, but for striving equally in research, grants, supervision, publication, training, student service, administrative duties and social responsibility (Hamid et al., 2018). Tougher requirement and harsher environment have caused academicians to be more individualistic kind of population who care only on their personal achievement (Ujang, 2011). Although changes are necessary in improving HEIs, problems stem from this issue should be wisely acknowledged. This is to avoid the outbreak of unproductive behavior within the setting. In Malaysia HEIs context, a system called as Key Amal Indicator (KAI) has been introduced as part of initiative to motivate organizational citizenship behavior and positive culture at work (Ujang, 2011). The fostering of organizational citizenship behavior (OCB) is imperative in enhancing the performance in universities (Macfarlan, 2007). This is because OCB creates a positive and supportive working environment by promoting helping behavior, guidance and support (Belogolovsky & Somech, 2010). This can boost university's overall performance by compelling ways of working while publishing journals, executing studies and services.

William and Anderson (1991) categorized two broad dimensions of OCB, which were organizational behavior performed towards *organization* (OCBO) and individual (OCBI). OCBO covers various types of behavior that were profitable to organization. For instance, the act of following procedure that helps easing managerial process. Meanwhile, OCBI concerns on behavior performed to help specific individuals such as covering for colleagues who are absent from work (William & Anderson, 1991). Body of literatures suggests that work values can boost OCB occurrence (Azlyn et al., 2010; Macfarlane, 2007; Podsakoff et al., 2000). In HEIs, having an upright work values help employees to better support the needs of students, colleagues and external stakeholders (Super, 1970), which eventually increase performance. Two most common types of work values are *intrinsic* and *extrinsic* work values (Limthanakom et al., 2008; Rokeach, 1973; Ros, 1999). Although work values component has been receiving a lot debate worldwide, those two are the most acceptable and widely applied (Hirschi, 2010). Since The Work Values Inventory (WVI) by Wu et al. (1996) was adopted in measuring the work value in this particular study, intrinsic work value was evaluated by terminal value. Meanwhile, extrinsic was measured by instrumental value. Intrinsic value (terminal) comprises three sub-dimensions of self-growth tendency, self-realization tendency and self-esteem tendency. Meanwhile, external (instrumental) value consists of four

dimensions, which are social interaction tendency, organizational security and economic benefits tendency, stability and anxiety-free tendency, as well as recreations, health and transport tendency (Ho, 2006).

In addition, previous study highlighted that work values can increase employee's attitude in terms of job satisfaction (Bhatia et al., 2012). Empirical evidences suggested that an academicians with a good work value tends to show a high level of job satisfaction (Froese & Xiao, 2012; Ho, 2006; Lim, 2010), which in turn enhances their OCB in organizations (Lim, 2010). Henceforth, this particular paper observes at how the variable can perform in between work values and OCB and validate it within HEIs setting. This paper is underlined by the Value-attitude-behavior hierarchy model by Homer and Kahle (1988) in which it is assumed that there is a strong relationship existed among values, attitudes and behaviors of individual against any situations and circumstances (Milfont et al., 2010). Based on this theory, work values can influence OCB directly and indirectly through job satisfaction. In addition, the main feature of the model is that it emphasizes on the mediating role of attitudes on the relationship between values and behaviors (Milfont et al., 2010). Thus, all of these objectives at the end of the paper contribute to a better understanding of OCB in HEIs setting particularly by connecting it to work values and job satisfaction. This will help future researchers, practitioners and policy makers to further understand revolving issues around OCB at work and ways to improve it.

LITERATURE REVIEW

Conceptualization of Work Value

The general terms of 'value' was firstly introduced by Rokeach (1973), which referred to the individual needs and desires towards any situation in their life. Work value refers to the value, satisfaction, or reward desired by an individual to his or her work (Koivula, 2008). It is a part or subset of overall human basic value where it specifically emphasizes on the need and desire to perform better at work. Since then, the concept has been expanded where researchers started to investigate the values at work. Previous study on work value has gathered numerous dimensions in explaining work values in organization (Spitzmuller et al., 2008). Super (1970), for instance, divided work values into a total of 15 dimensions known as altruism, aesthetics, creativity, intellectual stimulation, achievement, independence, prestige, management, economic returns, security, surrounding, supervisory relations, association, way of life and variety. Meanwhile, Robinson and Betz (2008) divided work value into three dimensions, which were intrinsic, extrinsic and concomitant values. Ho (2006) in contrast classified work values into two dimensions namely terminal values and instrumental values. Nevertheless, this paper follows the two dimensions of work values categorization (terminal value, instrumental values) as argued by Ho's (2006). The reason is because these two types of work value are the most used values at work and can accurately capture various scenarios in an organization (Hirschi,

2010). As aforementioned, terminal values comprised three dimensions, which are self-growth tendency, self-realization tendency and self-esteem tendency (Ho, 2006). All of the terminal values are related to individual's internal needs and desire towards work. These include the need for personal achievement and skills, fulfilling lifelong goals, self-recognition and desire to gain respect from others. Meanwhile, instrumental value involves four dimensions, which are social interaction tendency, organizational security and economic benefit tendency, stability and anxiety-free tendency and lastly recreation, health and transport tendency.

Although work value is a subjective need and desire of an individual, its importance could not be ignored. This is because, value itself is a fundamental core for the human being especially in shaping their attitude and belief towards life. That is why, one's value is often observed and evaluated in the process of hiring new people for an organization. Previous studies highlighted that among the important antecedents of organizational citizenship behavior (OCB) is work values (Azlyn et al., 2010; Macfarlane, 2007; Podsakoff et al., 2000). Organizational citizenship behavior deals with voluntary commitment of an individual within an organization, which is the behavior that is not included as a real contractual task when the person is signing work agreement. It is a positive act and another form of consideration that an employee portrays in managing their work and in helping others. Super (1970)

suggested that work value helped individual to develop superior understanding not only about themselves, but also others, which was crucial for effective communication in an organization. By having clearer work value, one could use their senses to be more understanding and positive towards their surrounding while fostering more positive attitude within their environment.

The importance of work values does not only set on cultivating positive organizational culture including OCB, but it also profoundly significant towards increasing job satisfaction of individuals in the workplace (Bhatia et al., 2012). Job satisfaction concerns on the feeling of fulfillment among employees towards their job (Aziri, 2011). Having a satisfied worker is the key to a sustainable organization as it hinders high employee retention. In fact, empirical evidences pointed out that workers with good work values have high level of job satisfaction (Froese & Xiao, 2012; Ho, 2006; Lim, 2010), which in turn enhances their organizational citizenship behavior inside their organizations (Lim, 2010). Decades of studies on job satisfaction have demonstrated sound understanding on how personal and environmental factors affect employees' level of job satisfaction and how job satisfaction in turn influences a variety of important workplace behaviors (Crede et al., 2007). Reviews from previous studies revealed that job satisfaction is either as an independent variable or dependent variable. The mediator role of job satisfaction has been supported by many prominent models with one of them is value-attitude-behavior

hierarchy (Homer & Kahle, 1988). This model points out that positive attitude is able to act as a mediator between individual values and their behavior in an organization. This model assumes that values could influence behaviors directly and indirectly through attitudes modification.

Relationship between Work Value and Organizational Citizenship Behavior

Reviews from literature highlighted that work value is among the prominent factors to establish high OCB occurrence in an organization. Recent research presented that there are several factors that can continuously promote OCB in an organization, which are related to the working environment and organizational culture (Zeyada, 2018). According to a previous study, terminal values such as self-growth tendency, self-realization tendency and self-esteem tendency have a positive relationship with OCB. For instance, a study by Lub et al. (2010) discovered that organization that needed achievement and development had a positive correlation with OCB. The particular study was conducted based on face-to-face on-site surveys among hospitality managers and found that satisfaction of work values was among the important keys to enhance OCB practice at work. Meanwhile, a study by Azlyn et al. (2010) on 200 academicians from a local university in Malaysia reported that work values had a positive relationship with OCB. The study that investigated the relationship between job status, job insecurity, work values with OCB found

that instrumental work values like social interaction tendency among employees fostered positive workplace environment and positive behavior within the setting. Therefore, the first hypothesis of this study is;

Hypothesis 1: *Work values (terminal and instrumental) is positively linked to OCB of the respondents.*

The Mediating Effects of Job Satisfaction in between Work Value and Job Satisfaction

A huge number of researches have mentioned the link between work value with job satisfaction (Arciniega & Gonzalez, 2005; Hegney et al., 2006; Profeli & Mortimer, 2010). Previous study showed that job satisfaction was positioned as an independent and dependent variable. In addition, it was found that job satisfaction is a significant outcome of work values (Judge et al., 2010; Lim, 2010; Lyons et al., 2006). Furthermore, job satisfaction is not only observed as a significant outcome variables of work values (Hegney et al., 2006; Lim, 2010) but also a significant predictor of positive behavior in the workplace such as organizational citizenship behavior (Jam et al., 2012). A study by Profeli and Mortimer (2010) on students revealed a significant relationship between intrinsic work values and job satisfaction over time, which aligned with that by Froese and Xiao (2012) as well as Liao and Chen (2012). Herzberg Theory likewise mentioned the important role of intrinsic and extrinsic factors in motivating and enhancing job satisfaction (Profeli &

Mortimer, 2010). This theory argues that high satisfaction is needed in the form of resources such as status, self-actualization, growth, achievement and social factors.

Job satisfaction itself refers to employee's positive attitude that later become one of crucial concept in the workplace (Givaki et al., 2017). Job satisfaction is not only an element to maintain employee's interest and factor to foresee employee turnover rate, but has now gain more popularity as a method to further enhance positive work behavior including OCB (Hemakumara et al., 2018). In some studies, job satisfaction has been found to portray a positive relationship with OCB (Paille, 2010; Podsakoff et al., 2009). A study by Swaminathan and Jawahar (2011) for instance revealed how high job satisfaction improved OCB in the academic sector. A study done on 252 faculty members in Tamil Nadu revealed a moderate relationship between job satisfaction and OCB. This particular pattern was further found across several studies (Chiboiwa et al., 2011; Mehboob & Bhutto, 2012) where job satisfaction was found as a predictor of OCB.

In respect to the mediating role of job satisfaction in this study, it was assumed that job satisfaction has the capability to explain or in statistical terms mediate the relationship between work values and OCB. In order to understand the nature of mediator variable, researchers often refer to a popular explanation by Baron and Kenny (1986), which explains that one variable is considered a mediator when it is positioned either as an independent variable

or dependent variable. A study by Ulfiani et al. (2014) found that job satisfaction was significant as a mediator in between self-efficacy and OCB. Meanwhile, a study conducted among 208 teachers in South Sulawesi, Indonesia discovered that job satisfaction acted as a negotiator in bridging the effects between self-efficacy and OCB, whereby enhancing self-efficacy improved job satisfaction, which then further promoted OCB level. Furthermore, the model of value-attitude-behavior hierarchy by Homer and Kahle (1988) also supported the mediating role of job satisfaction. This model posits that positive attitude can function as a mediator in between individual values and employee behavior whereby one's values can influence behavior directly and indirectly through attitude (Milfont et al., 2010). Since job satisfaction is one type of employee's attitudes, it was assumed that job satisfaction can act as a mediator variable that strengthens the relationship between work values and organizational citizenship behavior. That being said, below is the mediating hypothesis for this study:

Hypothesis 2: Job satisfaction mediates the relationship between work values (terminal and instrumental) and OCB of the respondents.

Framework of Study

Figure 1 was presented the framework of study that proposed the role of job satisfaction as mediator in the relationship between work values and organizational citizenship behavior.

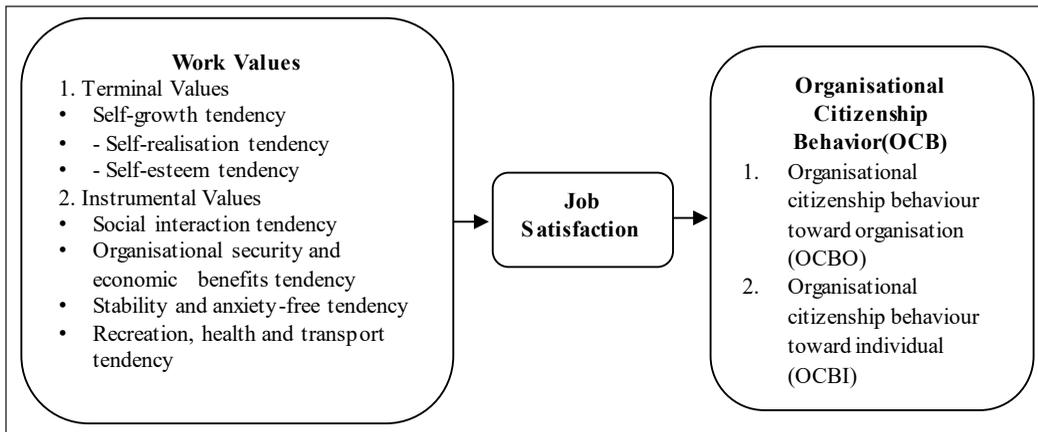


Figure 1. Framework of study

METHODS

Research Design

This study utilized a quantitative approach using survey as its research design. According to Cooper and Schindler (2003), research design refers to the blueprint for the data collection methods, measurement and data analysis methods used to answer the questions in the survey. Quantitative approach using survey or questionnaires demonstrates several advantages. First, it helps monitoring large data and more objective. Second, quantitative data is more quantifiable and in many circumstance can be easily generalized to a large population (Choy, 2014).

Population, Sample and Procedures

Sample was drawn from academicians of Malaysian public and private universities with two universities selected as samples (Multimedia University and University of Malaya). A set of questionnaires was sent to a total of 800 potential participants

with a stamped envelope addressed to the researcher. Potential respondents were briefed in the first page of the survey that their participation was voluntary and anonymous. A term where respondents could decline the study was also stated. All agreed participants were asked to complete and return the survey within a month. At the end, a total of 518 academicians completed the survey (for a response rate of 64.75%); however, a total of 58 participants (11%) were deleted based on Mahalanobis test (cutoff $p < 0.001$), leaving 460 participants as the final usable number.

Research Instrument and Validity/Reliability of the Instrument

Work Value. 49 items of The Work Values Inventory (WVI) by Wu et al., (1996) was selected to measure the work values. Wu et al., (1996) and Ho (2006) reported this instrument had a high reliability with coefficient alpha ranging from 0.79 to 0.94. There were no reverse-score items and all items were scored with 5-point Likert

scale ranging from 1 as not important to 5 as very important. Confirmatory factor analysis result showed that *terminal value* was a three-factor model incorporating i) self-growth tendency, ii) self-realization tendency and iii) self-esteem tendency with acceptable model fit ($X^2=416.94$, $df=170$, $X^2/df=2.45$, $GFI=0.92$, $RMR=0.02$, $CFI=0.96$, $RMSEA=0.06$, $AIC=538.94$, $CAIC=851.94$). Meanwhile, *instrumental value* as a four-factor model incorporating i) social interaction tendency, ii) organizational security and economic benefits tendency, iii) stability and anxiety-free tendency, as well as iv) recreation, health and transport tendency. The result also demonstrated acceptable model fit ($X^2=641.28$, $df=316$, $X^2/df=2.03$, $GFI=0.91$, $RMR=0.03$, $CFI=0.97$, $RMSEA=0.05$, $AIC=821.28$, $CAIC=1283.09$).

Job Satisfaction. Job satisfaction was measured using Copenhagen Psychosocial Questionnaire (COPSOQ) by the Danish National Public Centre. The job satisfaction sub-scale of COPSOQ was developed in 1997 with the scales having a good reliability (Kristensen et al., 2005). The instrument was measured by eight items. All answers were rated with 5-point Likert scale with 1- highly unsatisfied to 5- highly satisfied. The result of confirmatory factor analysis revealed the scale as a one-factor model with good model fit ($X^2=60.44$, $df=14$, $X^2/df=4.32$, $GFI=0.97$, $RMR=0.02$, $CFI=0.98$, $RMSEA=0.08$, $AIC=104.44$, $CAIC=217.33$). All items loadings were acceptable within range of 0.63 to 0.76.

Organizational Citizenship Behavior (OCB). William and Anderson's (1991) scale was used to measure OCB. The scale comprised of seven items of organizational citizenship behaviors toward organization (OCBO) and seven organizational citizenship behaviors toward individual (OCBI). In particular study, Cronbach alpha for OCBO and the OCBI scales were 0.83 and 0.88, respectively (Turnley et al., 2003). Confirmatory factor analysis showed the scale as a two-factor model incorporating OCBO and OCBI with acceptable model fit ($X^2=95.82$, $df=69$, $X^2/df=1.40$, $GFI=0.97$, $RMR=0.02$, $CFI=0.99$, $RMSEA=0.03$, $AIC=170.24$, $CAIC=354.96$). All items had acceptable factor loadings above 0.50 cutoff.

Data Analysis

This study conducted Structural Equal Modelling (SEM) using AMOS version 22. Confirmatory factor analysis was performed to confirm the measurement detail of all scales used, while latent modeling was used for hypotheses testing. The mediation effect was executed using AMOS by applying the bootstrapping approach with 1000 samples.

RESULT

Model Fit of the Overall Structural Model

Prior continuing with hypotheses testing, overall structural analysis was performed to test model fit among all the latent constructs. Overall model for the effect of work values on OCB yielded an acceptable fit ($X^2=3747.89$, $df=1841$, $X^2/df=2.04$, $GFI=0.79$, $RMR=0.03$,

CFI=0.91, RMSEA=0.05, AIC=4097.89, CAIC=4995.85). Similarly, the model of mediating job satisfaction showed a reasonable fit ($X^2= 4577.29$, $df=2356$, $X^2/df=1.94$, $GFI=0.78$, $RMR=0.03$, $CFI=0.91$, $RMSEA=0.50$, $AIC=4977.29$, $CAIC=6003.542.5$).

Demographic Profile

For demographic profile, this study consisted of 215 male (46.7 %) and 245 female (53.3 %) academicians, which made a total of 460 participants for the overall respondents. A total of 216 academicians (47.0%) were from a private university and 244 others (53.0%) were from a public university. Participants in this study were divided into four ethnic groups, which are 252 Malay (54.8%), 116 Chinese (25.2%), 60 Indian (13.0%) and 32 participants (7.0%) from other. In terms of age, participants in this study were mostly above 40 years old (158 respondents) and only 55 participants aged around 25 to 30 years old. Majority of participants were married, which totaled up to 349 academicians (75.9%) in this study. Since this study focused on public and

private academicians, participants included most lecturers and senior lecturers (179 participants) with only 27 participants who were professors. Besides, 178 participants held a Master’s degree and 282 participants held a Ph.D. All participants in this study mostly had a working tenure ranging from 6 to 15 years.

The Direct Effect of Work Value on Organizational Citizenship Behavior

The first hypothesis was tested using AMOS. As mentioned, latent modeling technique was adopted in modeling the result. Overall, work values only contributed 15% to OCBO and 18% to OCBI. Result from Table 1 indicates that only one dimension from terminal work value, which is *self-esteem tendency*, has a significant effect on OCBO, thus partly supporting the first hypothesis. In contrast, for OCBI, only one dimension, which is *Recreation, health and transport tendency*, showed a significant positive effect on OCBI. Other dimensions of terminal and instrumental work values reported very small and no significant effect on OCBO and OCBI.

Table 1
Direct effect of work values on OCB

Direct effect		Standardized Regression	S.E.	C.R.	R ²
Self-growth tendency	OCBO	0.13	0.09	1.64	
Self-realization tendency		-1.12	0.09	-1.25	
Self-esteem tendency		0.17*	0.07	2.06	
Social interaction tendency		0.07	0.05	1.05	0.151
Organizational security and economic benefits tendency		0.01	0.05	0.76	
Stability and anxiety-free tendency		-0.09	0.07	1.03	
Recreation, health and transport tendency		0.11	0.09	1.35	

Table 1 (continue)

Direct effect		Standardized Regression	S.E.	C.R.	R ²
Self-growth tendency	OCBI	-0.01	0.10	-0.13	0.180
Self-realization tendency		0.06	0.10	0.62	
Self-esteem tendency		0.15	0.07	1.87	
Social interaction tendency		0.12	0.06	1.76	
Organizational security and economic benefits tendency		-0.01	0.06	-0.12	
Stability and anxiety-free tendency		-0.17	0.08	-1.89	
Recreation, health and transport tendency		0.33*	0.10	3.88	

Note: *p<0.01, **p<0.001

Mediating Effects of Job Satisfaction

For the mediation effect of job satisfaction, the hypothesis was examined using bootstrapping approach with 1000 samples. The direct effect, indirect effect and total effect statistics were observed to examine whether or not there was any specific mediation effect existed for job satisfaction. Table 2 presents the direct and indirect effects of model of job satisfaction as a mediator. Indirect effect of job satisfaction was observed significant only in a relationship between *self-realization*

tendency (terminal) with OCBO and OCBI. However, the rest of the paths however were not significant, henceforth only partly supporting Hypothesis 2.

In summary, the present results ascertained that work value contributed 15% to OCBO and 18% to OCBI. The finding revealed that job satisfaction only fully mediated the relationship between self-realization tendency as well as OCB (OCBO and OCBI). However, job satisfaction did not mediate any relationships between other dimensions of work values.

Table 2
Mediator role of job satisfaction in the relationship between work values and organizational citizenship behavior

Work Values → Job Satisfaction → Organisational citizenship behavior	Indirect effect	Direct effect	Bias-correlated 95%		Types of Mediator
			Lower bound	Upper bound	
Self-growth tendency→OCBO	0.01	0.12	-0.02	0.05	No
Self-growth tendency→OCBI	0.02	0.03	-0.03	0.08	No
Self-realization tendency→OCBO	0.06*	-0.16	0.01	0.10	Full
Self-realization tendency →OCBI	0.06*	-0.01	0.01	0.15	Full
Self-esteem tendency→OCBO	0.02	0.11	-0.01	0.08	No
Self-esteem tendency →OCBI	0.04	0.11	-0.02	0.12	No
Social interaction tendency→OCBO	0.004	0.07	-0.03	0.04	No

Table 2 (continue)

Work Values → Job Satisfaction → Organisational citizenship behavior	Indirect effect	Direct effect	Bias-correlated 95%		Types of Mediator
			Lower bound	Upper bound	
Social interaction tendency → OCBI	0.01	0.12	-0.04	0.06	No
Stability and anxiety-free Tendency → OCBO	0.01	0.001	-0.04	0.05	No
Stability and anxiety-free Tendency → OCBI	0.01	-0.02	-0.06	0.08	No
Organizational security and economic benefits Tendency → OCBO	-0.003	0.01	-0.05	0.04	No
Organizational security and economic benefits Tendency → OCBI	-0.01	-0.16	-0.08	0.06	No
Recreation, health and transport Tendency → OCBO	0.004	0.11	-0.03	0.05	No
Recreation, health and transport Tendency → OCBI	0.01	0.32**	-0.06	0.07	No

Note: * $p < 0.01$, ** $p < 0.001$

DISCUSSION

This paper demonstrated positive and significant effects of certain dimensions of work value on OCB, which is consistent to several former studies (Azlyn et al., 2010; Jahangir et al., 2004). It was discovered that those who scored high in terminal/instrumental values showed greater OCB in the university. Specific results pointed out that only one dimension of terminal value in particular *self-esteem tendency* affected OCB in the HEIs with positive degree of relationship. This result ascertained that a high level of self-esteem was required for an individual to engage in OCBO at work. In regard to this, this study argued that those with higher self-esteem were more satisfied and objective, henceforth promoting more engagement in using positive behavior at work (Sparrow et al., 2010).

Only one dimension of instrumental work values was however linked to OCBI in this study. In particular, it was found that

recreation, health and transport tendency conveyed a significant positive effect on organizational citizenship behavior towards individuals (OCBI). This enlightened the importance of recreation, health and transport tendency to help others. Those who were balanced with their life had a high tendency to help others by voluntary sharing the workload or listening to problems. As mentioned in Herzberg theory, those with more resources tend to engage in more positive behavior including OCB (Ibrahim, 2014). This study however revealed that other than those two dimensions above had too small or no significant effect on OCB at work. Although some of the dimensions were proven their importance in former studies, they do not convey any significant effect on the study population. This could be possibly explained by the collectivist culture, which regularly practice helping and to respect others above concerning individual needs or desires. As collectivists put more emphasis

with group goals including helping others, therefore, it could be simply treated as a general cultural value, rather than values embedded with work (Cho & Yoon, 2009; Ting & Ying, 2013).

Apart of the previous results, this study also discovered the positive mediating potential of having a good job satisfaction in explaining work value and OCB at work. Out of several paths tested in this paper, job satisfaction was found only to deliver the effect from *self-realization tendency* (terminal) with both OCBO and OCBI. This established the feeling of academicians towards satisfaction on their personal needs and desires to improve job satisfaction and in turn improve OCB level at work (Sparrow et al., 2010). Consistent with some of former studies (Crede et al., 2007; Ulfiyani et al., 2014), the present result reflects the primary argument highlighted in the value-attitude-behavior hierarchy by Homer and Kahle (1988). This study established an evidence centralized in HEIs that a positive attitude such as job satisfaction has a specific capability in functioning as mediator between employees' values and their behavior. Other than that, this result was partly supported by the Theory of Planned behaviors by Ajzen (1991) that suggested that the specific interaction between values, employee attitude and behavior in organization could produce a specific degree of outcome whereby employee willingness and readiness to accept or reject any situation had a link to their level of job satisfaction, which further promoted OCB at work.

IMPLICATION OF STUDY

This particular paper offers several important theoretical and organizational implications. First, it contributes to the extension on OCB and work value areas. From the findings, this study has listed several key areas that can be tackled to promote OCB at work within HEIs setting. First, out of several dimensions of work values outlined in this study, only *recreation, health and transport tendency* were particularly found to be linked with high OCB. This ascertains that employee's active and balance participation has a direct implication on the degree of OCB. Henceforth, policymakers and university in particular should focus more on this area to improve the frequency of positive behavior including OCB within the HEIs setting. Second this paper expands the discussion on the importance of job satisfaction in explaining work values with OCB within HEIs population. Henceforth, the information from this paper can help universities as well as Ministry of Education (MOE) to design a good intervention or training programs to enhance organizational citizenship behavior among academicians across Malaysia. These interventions or trainings can help the institutions to promote organizational citizenship behavior at work, which is one of the crucial area for organizational performance, motivation and health.

CONCLUSION AND LIMITATION

As a conclusion, this study has proven the direct effect of self-esteem tendency and recreation, health as well as transport

tendency with OCB in regards to Malaysian HEIs setting. Aligned with the Value-attitude-behavior hierarchy (Homer & Kahle, 1988), this study provides a contemporary evidence how positive attitude such as job satisfaction can be further utilise to strengthen the relationship between terminal values and OCB within the higher education setting. Likewise, this paper also highlights few practical explanations on the importance of intrinsic and extrinsic motivation towards enhancing academics' job satisfaction. Supported by Herzberg Theory, this study ascertains job satisfaction as a valuable resource that enhances positive work behavior at the higher education (Hemakumara et al., 2018). Since Malaysia holds strong in collectivist culture, majority its people have a good willingness to help others regardless the needs and desires. Result in this study also reported that work values contributed only 15% to OCBO and 18% to OCBI, henceforth the remaining 67% may relate to other factors that were not investigated in this study. Organizations that emphasize more on good behavior can help their employees to be more productive in their job and help them to carry their job effectively (Ulfiani et al., 2014). However, this paper has its own limitation. Since it was carried out in HEIs setting, the finding is only generalizable within the same setting. Second, the design of this study is cross-section, hence it does not allow causality inference.

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Relationship Between Physical Activity in Urban Green Space and Dietary Patterns among Obese Children in Kuala Lumpur, Malaysia

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ABSTRACT

In the past three decades, obesity rates affecting children in Malaysia have been rising rapidly, thereby presenting a major public health concern. However, physical activity and diet patterns in green space have been seen as effective environmental components that improve the quality of life. Hence, this study would determine the obesity levels at baseline (phase 1), after 90 days (phase 2) and after 180 days (phase 3). It further aimed to investigate the association of physical activity and diet pattern with the body mass index (BMI) of the respondents. The sample consisted of 12 respondents and this experimental study utilized a questionnaire and a checklist to record the measurements of height and weight by calculating the respondents' physical activity, daily diet, and BMI. The scores were calculated to determine the level of obesity of the respondents by using paired sample t-test and linear regression model to analyze the influence of physical activity and diet patterns on the respondents' BMI. The findings of this study show that there was a significant decrease in the levels of BMI before and after the study as participation in moderate to vigorous physical activities and more intake of fruits and water influence the respondents' BMI. Therefore, this study reveals that physical activity and diet patterns in urban green space can have significant impacts on BMI and also play important roles in reducing childhood obesity.

Keywords: Body Mass Index (BMI), children diet pattern, green space, outdoor physical activity

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INTRODUCTION

The worldwide prevalence of overweight and obesity has more than doubled between 1980 and 2014, with no country achieving success in reducing obesity rates. In 2014,

an estimated 41 million (6 percent of the world's population) of children under 5 years of age were affected by obesity or overweight (World Health Organization [WHO], 2014). Therefore, it is estimated that 70 million young children will be overweight or obese by 2025 (WHO, 2016). The prevalence is rising continuously and may cause serious complications by reducing the quality of life for children and posing a risk for adult obesity (Davidson et al., 2017; Saneei et al., 2016)

Childhood obesity has been shown to lower children's quality of life as it is associated with insulin resistance, dyslipidemia, and elevated blood pressure, negative self-image, declining degrees of self-esteem associated with sadness, loneliness, and nervousness. Furthermore, it is an influential determinant of adult obesity (Davidson et al., 2017; Saneei et al., 2016). Besides obesity in children, adolescents and adults are associated with a significant reduction in life (WHO, 2014; Ruderman et al., 2013; Tsiros et al., 2009; Zuckerman et al., 2014) and a greater risk of teasing, bullying, and social isolation (Bacchini et al., 2015). It is presumed that dietary intake and physical inactivity in green space are the major causes of obesity. However, in examining the physical and health implications of childhood obesity, some studies have suggested that weight loss through participation in physical activity in green space and diet habits may avert these problems. An archival government report (US Centers for Disease Control and Prevention [CDC], 2004) recommends at

least 30 minutes a day of physical activity with a moderate intensity most days of the week and sensible food portion size. Furthermore, the US National Institute of Health Obesity Education Initiative Expert Panel suggests a caloric deficit of 500 kcal to 1000 kcal per day using an individualized dietary strategy, along with 45 minutes of physical activity with moderate intensity for 5 days a week (Foster-Schubert et al., 2012). Although many studies have focused on intervention on obesity, few studies have been conducted on children compared to adults (Summerbell et al., 2009). Findings from studies by Akpinar (2016) and Watson (2014) showed that decreased sedentary behavior and increased physical activity using urban green space were associated with a remarkable decrease in energy intake, percentage of overweight and body fat in children. Hence, living in close proximity to urban green space and contact with it have been shown to reduce childhood obesity rates (Ekkel & De Vries, 2017; Jansson et al., 2016; Sander et al., 2017; Schipperijn et al., 2013; Wolch, 2011). However, Metcalf et al. (2012) claimed that physical activity and intervention with green space had small effects in reducing the body mass index (BMI) of children. The term green space has no universally agreed definition (Yusof & Rakhshandehroo, 2016). Hence, in this study, green space refers to any area or land covered with vegetation or water and it is including the use of parks, gardens, green corridors, playing fields and derelict or vacant land which is vegetated.

A study by Tandon et al. (2016) suggests that physical activity and a healthy diet in early childhood are associated with better cognitive outcomes and obesity prevention in young children. Similarly, James et al. (2015) claimed that a reduction in the number of carbonated drinks consumed was associated with a reduction in the number of overweight and obese children. Another study by Wang et al. (2016) suggests that more frequency of eating can lead to a decreased risk of obesity. Furthermore, Murakami et al. (2016) suggested that a higher snack frequency was associated with overweight and obesity. Additionally, Oda-Montecinos et al. (2013) claimed that diet patterns and eating behavior could contribute to a rapid increase in overweight and obesity levels.

These studies have pointed out obesity as a huge emerging problem and there is a need to investigate this problem especially among children. Therefore, this study aims to determine the impacts of physical activity and diet patterns in urban green space on obesity in children. The results may reveal evidence that green space provides the opportunity for physical activity and can be an important environmental determinant of the health of children.

METHODS

Enrolling of the participants for this study was done through email messages sent randomly to parents within Kuala Lumpur, with the purpose clearly stated as fighting obesity through investigating the association with the frequency of green space visits

and diet pattern with childhood obesity in children aged 6-12 years. A total of replies by 18 emails were received from parents indicating their interests and willingness to voluntarily allow their children who were within the age range to participate in the program. A follow up of email messages were forwarded to the parents who had indicated their interests to allow their children to participate in the program. Meetings were also scheduled to brief the parents and their children on the details of the program.

This study comprised three phases: phase 1 at the baseline, phase 2 after 90 days, and phase 3 after 180 days. Anthropometric data were collected from the children at the baseline (phase 1) and after 90 days (phase 2). Initially, parents were requested to fill up a questionnaire with information including demographic data which were recorded. Checklist booklets were issued to the parents to record information on the daily physical activity and daily diet patterns of the children at the baseline and after 90 days. The checklist booklets were used to collect information about the types of food, fruits, snacks, drinks, where these foods were eaten, portion sizes of these meals, types of physical activity, time spent in green space, and the number of time the respondents visited green space a week for the whole study period.

When this study continued to the third phase, a meeting session was held with the parents to collect anthropometric information on the children and the checklist booklets on their diets and physical activities. A flying

disc was given to each respondent as a token of appreciation for participating at the end of the session. For this study, a sample of 12 respondents with 5 male and 7 female obese primary school children aged 6-12 years old were recruited. However, 3 respondents later withdrew from participating in this study.

Measurements

The height and weight of the recruited children were measured according to the International Standard for Anthropometric Assessments (Norton et al., 1996) whereas the body anthropometry measurement was based on the National Health and Nutrition Examination Survey [NHANES] (2017). The height of the respondents was measured with a stadiometer for stature (to the nearest 0.1cm). The stretch stature technique was used to measure the stature and measurements taken in the morning with the head placed in the Frankfort plane position. The bodyweight of the respondents was also measured with a body weighing scale Tinata (HD-314 digital weight scale) to the nearest 0.1kg. The respondents wore light clothes and no shoes with the head held straight following the Frankfort plane position. The respondents' BMIs were then calculated using the standard formulae, issued by WHO (2014). In epidemiological studies, the BMI has been suggested for use due to its simplicity in measurement and correlation with body fat (Himes & Reynolds, 2012). However, the amount of body fat alters with age and differs between boys and girls, the BMI for age percentiles were used to interpret the BMIs of the

respondents. Referring to NHANES (2017), the BMI charts on age growth percentiles for boys and girls have taken into consideration the differences and allow the conversion of BMI into percentiles.

Data Analysis

This study utilized the following methods to analyze the data obtained from the anthropometric measurement, questionnaire, and checklists. To achieve the goal of this study, paired sample t-test and ANOVA were used to determine the levels of obesity of the respondents at the baseline, after 90 days, and after 180 days of the experiment. Linear regression was also used to determine the influence of physical activity in urban green space and diet patterns on the respondent's weight at the baseline, after 90 days, and after 180 days.

FINDINGS

Obesity Level Among Children Aged 6-12 Years Between the Baseline (phase 1) and After 90 Days (phase 2)

To determine the obesity levels among children aged 6-12 years between the baseline (phase 1) and after 90 days (phase 2), a paired sample t-test was conducted. As seen in Table 1, the total number of respondents was multiplied by 90 days (represented by N in the table). A significant difference was found ($t=5.99$, $p<0.05$) between BMI levels for phase 1 ($M=26.05$, $SD=4.80$) and phase 2 ($M=25.48$, $SD=4.21$). The decrease in the mean BMI difference between the scores of phase 1 and phase 2 was 0.56, as a result of intervention by diet

pattern and frequent use of urban green space by the children. Hence, it can be concluded that the levels of BMI among the children at the beginning of this study and after 90 days decreased significantly, as the p value was 0.00 which was less than 0.5% level of significance. The present findings are supported by several empirical studies which point out that frequent visits to green space and participation in moderate or vigorous physical activity are associated with decreased BMI (Goss, 2003; He et al., 2004; Maas et al., 2009; Potwarka et al., 2008; Monyekil et al., 2012). However, none of these studies consider diet along with green space to be associated with BMI, in contrast to this study where supports diet patterns especially the intake of fruits

to be associated with a decrease in BMI (Schroder, 2010).

Association of Children's Diet Pattern and Physical Activity with Obesity After 90 Days (Phase 2)

Linear regression analyses were performed to determine the influence of dietary patterns on the BMI of the respondents after 90 days (phase 2). Based on Table 2, the results from breakfast showed that a significant regression equation ($f(4, 25) = 2.41, p = 0.02$ with $R^2 = 0.27$) was found with an increase in fruit portion which predicted a reduction in BMI of the respondents. The results from lunch indicated that increases in fruit portion ($f(4, 16) = 79.04, p = 0.04$ with $R^2 = 0.95$) and drink portion ($f(4, 16) = 79.04, p = 0.00$ with

Table 1
Levels of BMI among children aged 6-12 years before and after 90 days

BMI	N	Mean	Mean Difference	Std. Deviation	t	Sig. (2-Tailed)
Phase 1	810	26.05	0.56	4.80	5.99	0.00
Phase 2	810	25.48		4.21		

Table 2
Regression model for portions at breakfast, lunch, and dinner (β value) after 90 days (phase 2) (Dependent variable: BMI)

	Breakfast	Lunch	Dinner
(Constant)	30.09 (1.68)***0.00	9.65 (1.70)***	26.66 (3.97)***
Food	0.34 (0.98)	0.81 (0.52)	3.49 (2.41)
Fruit	-2.36 (1.00)**	-0.95 (0.44)**	-0.783 (1.45)
Snack	0.736 (1.40)	-0.88 (0.48)	4.02 (3.12)
Drink	1.07 (0.79)	10.96 (0.66)***	-5.84 (2.53)
R-squared	0.27	0.95	0.49

Note: values in parenthesis are standard error. *, ** & *** denote significance at 10%, 5% & 1% levels respectively.

$R^2=0.95$) were significant predictors of BMI of the respondents. However, the results from dinner showed no significant predictor influencing the BMI of the respondents. The results of this study are supported by findings of other empirical studies that claim that the intake of fruits was predictive of BMI (Goss, 2003; He et al., 2004; Schroder, 2010). In contrast, a study by Field et al. (2003) found that the intake of fruits and fruit juice was not predictive of changes in BMI with no significant influence between fruit consumption and BMI. Therefore, not all meals can influence BMI but frequent visits to green space can have an influence.

This analysis further explores the influence of time spent in green space and moderate or vigorous physical activity on the BMI of the respondents. The linear regression analysis is presented in Table 3. The results showed that among the covariates, only the vigorous physical activity had a significant influence on the BMI of the respondents ($f(3, 65) = 3.09$, $p = 0.00$, with $R^2=0.10$). Other empirical findings on the influence of green space on weight outcomes are mixed and inconsistent. However, the findings of this study are supported by several empirical studies which reveal that green space is positively connected to a higher level of physical activity which consequently could lower BMI (Akpinar, 2017; Giles-Corti et al., 2005; Nielsen & Hansen, 2007; Roemmich et al., 2006). None of these studies investigated the effects of green space and diet on BMI. In contrast, other studies found no statistically significant

influence between green space use, the level of physical activity and BMI (Hillsdon, et al., 2006; Hoehner et al., 2005; Maas et al., 2009; Potwarka et al., 2008).

Table 3
Regression model for time spent in green space, moderate and vigorous physical activities after 90 days (phase 2) (Dependent variable: BMI)

Model	β coefficient
(Constant)	31.24 (1.18)***
Time spent on green space	-0.19 (0.46)
Moderate activity	-0.09 (0.44)
Vigorous activity	-1.21 (0.42)***
R-square	0.10

Note: values in parenthesis are standard error. *, ** & *** denote significance at 10%, 5% & 1% levels respectively

Obesity Level Among Children Aged 6-12 Years After 180 Days (Phase 3)

To determine the obesity level among the children aged 6-12 years after 180 days (phase 3), a one-way ANOVA was done. As seen in Table 4, there was a significant difference in BMI levels for all phases, with $F(2, 2427) = 13.63$, $P=0.00$, as the p value was at 0.00, less than 0.5% level of significance, as a result of intervention by frequency of visits to green space and diet pattern. Hence it can be concluded that the levels of BMI for all the phases of this study were significant.

Based on Table 5, the post-hoc comparison using the Turkey HSD test indicated that the difference in the mean scores of BMI levels between phase 1 and

phase 2 ($m=0.57$, $p=0.03$) was significant. However, the difference in the mean scores of BMI levels for phase 1 and phase 3 ($m= -0.60$, $p=0.02$) was also significant. Furthermore, the difference in the mean scores of BMI levels for phase 2 and phase 3 ($m= -1.16$, $p=0.00$) was found to be statistically significant as the p value was at 0.00, less than 0.5% level of significance. These results suggest that diet patterns and visits to green space can reduce the weight

of the children. These findings are supported by several empirical studies that frequent visits to green space and participation in moderate or vigorous physical activity are associated with decreased BMI (Maas et al., 2009; Potwarka et al., 2008; Monyekil et al., 2012; Van den Berg et al., 2017). Other studies (Goss, 2003; He et al., 2004; Schroder, 2010) also support the fact that diet pattern especially the intake of fruits is associated with a decrease in BMI.

Table 4
ANOVA table for the level of BMI after 180 days (phase 3)

Source	Ss	df	ms	f-value	Sig-value(p)
Between groups	551.40	2	275.70	13.63	0.00
Within	49085.40	2427	20.22		
Total	49636.80	2429			

Table 5
Post-hoc test for multiple BMI levels between phases

Item	Phase 1	Phase 2	Phase 3
Mean	26.05*	25.48*	26.65*
N	1620		

Note: * indicates significant difference

Association of Diet Pattern and Physical Activity with Obesity After 180 Days (Phase 3)

In the third phase (after 180 days), a linear regression analysis was done to examine the influence of time spent in green space, moderate and vigorous physical activities on the BMI of the respondents. Based on Table 6, the results showed that the time spent on green space was statistically significant on BMI, with $f(3,164)=28.10$, $p=0.00$, and $r^2=0.34$. Similarly, moderate physical activity was found to be statistically significant on

BMI, with $f(3,164)=28.10$, $p=0.00$, and $r^2=0.34$. Vigorous physical activity was also statistically significant on BMI, with $f(3,164)=28.10$, $p=0.03$, and $r^2=0.34$, as the p value was less than 0.05 level of significance. Other empirical findings on the influence of physical activity in green space on weight outcomes are varied and inconsistent. However, the findings of this study are supported by several empirical studies which reveal that green space is positively connected to a higher level of physical activity which then lowers BMI

(Akpınar, 2016; Frank, et al., 2004; Giles-Corti, et al., 2005; Roemmich et al., 2006; Nielsen & Hansen, 2007). In contrast, other studies found no statistically significant influence between green space use and the level of physical activity on BMI (Hoehner et al., 2005; Hillsdon et al., 2006; Maas et al., 2009; Potwarka et al., 2008).

Table 6
Regression model for time spent in green space, moderate physical activity, and vigorous physical activity after 180 days (phase 3) (Dependent variable: BMI)

Model	β coefficient
(Constant)	26.68 (0.68)***
Time spent on green space	1.65 (0.26)***
Moderate activity	-960 (0.20)***
Vigorous activity	-1.00 (0.22)***
R-square	0.34

Note: values in parenthesis are standard error. *, ** & *** denote significance at 10%, 5% & 1% levels respectively.

Linear regression analysis was performed to determine the influence of diet patterns on the BMI of the respondents after 180 days (phase 3). As seen in Table 7, the results for breakfast indicated a statistically significant regression equation for food with $f(4, 34)=12.05$, $p=0.00$, and $R^2=0.58$, snacks with $f(4, 34)=12.05$, $p=0.01$, and $R^2=0.58$, and drinks with $f(4, 34)=12.05$, $p=0.00$, and $R^2=0.58$. These portions were statistically significant predictors of BMI. The results for lunch indicated an increase in only drink portion, with $f(4, 34)=12.05$, $p=0.00$,

and $R^2=0.75$, which was a statistically significant predictor of BMI, as the p value is less than 0.05. However, the results for dinner showed no statistically significant regression equation was found for all covariates to influence BMI. The results of the present findings are supported by several empirical studies that claim that the intake of fruits is predictive of BMI (Goss, 2003; He et al., 2004; Schroder, 2010). In contrast, a study by Field et al. (2003) found that the intake of fruits and fruit juice was not predictive of changes in BMI, with no statistically significant influence between fruit consumption and BMI.

To the best of our knowledge, this study is the first to determine the association of the time spent on physical activity in urban green space and diet pattern with children's obesity in Kuala Lumpur, Malaysia. After investigating the association for the different phases, the results showed a significant association of physical activity in urban green space and diet pattern with children's obesity, demonstrating their definite roles in fighting the epidemic of obesity in children and perhaps adults. Not all meals were found to have positive relationships with BMI, although the majority of the respondents drank plain water and had their meals at home while maintaining considerable food portions throughout the study duration. Furthermore, the results showed that most of the respondents participated in 30 minutes of moderate to vigorous physical activities a day for most days of the week, consistent with the findings by Foster-Schubert et al. (2012).

Table 7

Regression model for portions at breakfast, lunch, and dinner after 180 days (phase 3) (Dependent variable: BMI)

	Breakfast	Lunch	Dinner
(Constant)	20.23 (2.24)***.000	8.95 (1.16)***	12.29 (1.86)***
Food	4.79 (1.14)***	0.74 (1.00)	3.08 (1.73)
Fruit	0.109 (1.06)	1.46 (0.81)	1.84 (1.06)
Snack	-3.22 (1.22)***013	0.50 (0.72)	0.16 (1.77)
Drink	3.08 (0.40)***	7.28 (1.04)***	2.36 (1.42)
R-squared	0.58	0.75	0.33

Note: values in parenthesis are standard error. *, ** & *** denote significance at 10%, 5% & 1% levels respectively.

DISCUSSIONS

In summary, this study is the first to examine and evaluates physical activity and diet pattern using descriptive statistic, it also determined the level of obesity among the respondents at different phases using paired sampled t-test and one-way ANOVA and further determined the association of physical activity and diets pattern of the respondents on their weight in Kuala Lumpur city. The results show that physical activity and diet significantly impact on the respondent's weight during the study. The findings show that more than half of the respondents 54.5% engage in moderate physical activity (brisk walking), less than half of the respondents 39.1% engage in vigorous physical activity (jogging) and less than half of the respondents 39.5% participate in physical activity in green space for (1-2hrs). However, the diet pattern results also show that at breakfast, more

than half of the respondents had nasi lemak 54.3%, and majority had apples 62.0% while at lunch majority of the respondents had plain water 71.0%. Nevertheless, at dinner, the findings show that more than half of the respondents had other foods 59.1% and more than half of the respondents drank plain water 53.0%. Additionally, for serving portions at breakfast, the result of the study shows that more than half of the respondents had ½-1cup of food 59.8% and ½-1glass of drink more so the majority of the respondent had 2-3pieces of fruits and snacks 65.4% and 65.1%. Further, at lunch, majority of the respondent had ½-1cup of food 63.6% and 2-3glasses of drinks 62.9% and more than half had 2-3 pieces of fruits 51.4%. Finally, at dinner, the study result shows that the majority of the respondent had ½-1cup of food 61.8%, 2-3pieces of snacks 65.4%, followed by 2-3 glasses of drinks 66.8% and more than half had 1piece of fruits 52.9%.

Hence, the study results show that the majority of the respondents have dinner 72.1% at home and more than half of the respondents have breakfast and lunch at home 57.3% and 58.6 at home. Nonetheless, the findings also show that there was a significant decrease in the level of BMI after the study and participation in moderate to vigorous physical activity, more intakes of fruits and water influence the respondent's BMI. To reduce the rising prevalence of obesity, parents should ensure that their children participate in frequent moderate to vigorous physical activity and should also encourage the intake of more fruits and water along with their meals.

CONCLUSION

Malaysia is known as Asia's fattest country which recorded an increase in its obesity rate according to the national health and morbidity survey of 2015. Physical activities in green space and diet patterns have become the cornerstone of intervention on overweight and obesity. However, to the best of our knowledge, this study provides one of the first findings on the association of physical activity in urban green space and diet pattern with childhood obesity in Malaysia. It reveals that frequent physical activity in green space and diet patterns can significantly affect BMI and further play important roles in reducing childhood obesity. Therefore, the primary schools should be encouraged to conduct courses on physical activity in their curriculum. Parents too ought to encourage children's visits to green space, participate in physical

activity and promote the intake of fruits and plain water alongside meals with smaller portions to improve the general health of children. Based on the results of the study, this research team recommends that future studies should consider using different approaches, for examples, pedometer and GPS trackers to record distances and time spent on green space and use a subjective dietary assessment method (with 24 hours of diet recall) to reveal the effectiveness of physical activity and diet pattern in addressing the prevalence of childhood obesity. It is further recommended that other age groups and adults be investigated in longitudinal studies to disclose any casual association.

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Neumatic Singing in Thai Popular Singing, 1925 - 1967

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ABSTRACT

Thai popular singing originated in 1925 during a period of radical change in the country and later became an important element of entertainment businesses including musical theatres, Thai films, bands, radio plays and television shows. Thai popular singing methodology, particularly the pronunciation, was continually developed and modified by the traditional singers. They resolved problems of incorrect pronunciation through neumatic singing which was considered the pitch of tone marks and its pattern matches the acciaccatura as an ornamentation in a piece of music. This technique resulted in linguistic verification and this helped reflect and enhance the connection between Thai language and music. If the pitch of the word's tone mark changes, the musical pitch will accordingly change. Therefore, the identity of Thai popular singing comes from the sound characteristics of the Thai language which create the melody and singing accent. This technique continues to be used in Thai popular singing by the new generation singers.

Keywords: Identity of popular singing, language and music, neumatic singing, Thai popular music, Thai popular singing

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INTRODUCTION

Thai popular singing refers to the singing of 'phleng Thai sakon'. Wong (1998) defined 'phleng' as musical piece and 'sakon' as Western. Therefore, phleng Thai sakon signified Thai music in a Western style (Amatyakul, 2011). During the early 20th century which was a time of the radical change, a new form of entertainment called Thai popular singing gained popularity over

traditional singing in Thai society. Western cultures, politics, governance, clothing, way of life and political values influenced Thai popular singing, particularly popular music in the 20th century which spreads all over the world. Lord and Snelson (2008) mentioned that “since the mid-1950s, pop has represented the largest and most familiar of all musical styles throughout the world”.

The musical theatre was the first entertainment which introduced Thai popular singing in a western style to Thai people during the reign of King Rama VI of early 1900s. The accompanying music and singing of musical theatre has gradually changed from Thai traditional music to a new music style called ‘wong khruang sai pha som’ (‘wong’: band, ‘khruang sai’: string instruments, ‘pha som’: mixing) (Inkhong, 2016). Miller (1998) further explained that “this band is adding some Western instruments such as the pedal organ, the accordion, the violin and the piano joined with Thai traditional stringed ensemble.” Finally, in 1925, the bands of Thai popular music began playing with all Western instruments and this heralded the beginning of Thai popular singing. Later, Thai popular singing became one of the important elements of entertainment such as Thai films, bands, radio plays and television shows. Until 1939, Thai popular singing became an entertainment in its own right and was directly presented by the professional singers and musicians who were members of the big bands established and controlled by the Thai Government. The popularity of such bands under the government agencies

rapidly increased and encouraged the establishment of numerous private bands. The singers who were the members of the government controlled bands and the private bands became the important people who carefully nurtured and developed the method of Thai popular singing in a Western style.

PREVIOUS STUDIES ON THAI LANGUAGE AND SINGING

As highlighted in the brief history of Thai popular singing, this period presents the transitional point of popular singing from the Thai traditional style to its Western counterpart. This article focuses on the characteristics of Thai popular singing, particularly the correct pronunciation of Thai lyrics written for melodies in the style of Western music. According to Phillips (2003) and Miller (2004), pronunciation is a theory which explains the production of consonant and vowel sounds as equally important. Therefore, producing consonant and vowel sounds correctly and clearly allows singers to convey the appropriate meaning and feeling of the song to their audiences.

Pronunciation is closely related to the lyrics which are written in various languages of their own unique pronunciations. As a result, to study pronunciation in singing, linguistic factors should be focused on in order to understand the particular method of Thai popular singing. Language can generally be divided into two main groups, namely (1) tonal language and (2) non-tonal language. In this article, the analysis of the

pronunciation of singing Thai language, a tonal language will be presented. In a tonal language, a word consists of consonant, vowel and intonation, affecting the meaning of the words. Therefore, saying words with different tones can change their meanings. Further, a tonal language may have between two and eight different tones (Crystal, 2010; Hornsby, 2014; Kennedy, 1994; Liu et al., 2010; Trask & Stockwell, 2007). For example, Cantonese has six contrastive tones (mid-level, low-level, high-falling, low-falling, high-rising, and low-rising tone), Mandarin Chinese has a neutral tone and four contrastive tones (high-level, rising, falling, and falling-rising tone), Margi (spoken in Nigeria) has four contrastive tones (two high, two low, high-low, and low-high tone), Lushai has four contrastive tones (extra-high, high, mid, and low tone) (Crystal, 2010; Grasu, 2015; Liu et al., 2010; Liu et al., 2016; Trask & Stockwell, 2007). Therefore, the study of Thai pronunciation in singing is not only the consideration of consonant and vowel sounds but also the consideration of a tone mark of sound.

The Thai language has one neutral tone (middle tone) and four contrastive

tones (low, falling, high, and rising tone) (Lancker & Fromkin, 1973). Before World War II, Mary R. Haas, an American linguist learned the Thai language through direct elicitation from the native speakers and eventually became one of the leading global specialists in the language. Haas taught Thai language at the Berkeley Oriental Languages Department from 1947 to 1960 (Matisoff, 1997). She discussed the tones of Thai language. In 1958, she showed that the tones of four Thai dialects had tone patterns differing in their relation to consonants and to geographical occurrence. In addition, she invented and adjusted symbols for the five tone marks of Thai language in her book entitled “Thai English Student Dictionary” published by Stanford University Press in 1964 (Ketsiri, n.d.). Later, Ketsiri wrote a musical notation to explain the correct pronunciation of tone marks in the Thai language as in Figure 1.

As previously mentioned, the relation between the music notation and the pronunciation of tone marks in Thai language suggests that neumatic singing technique is important in the pronunciation in singing Thai popular songs. The word ‘neumatic’ is an adjective coming from

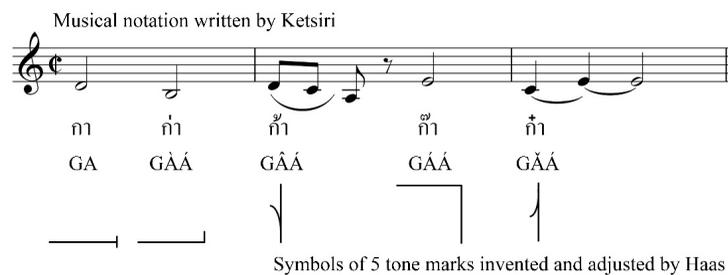


Figure 1. Musical notation and symbol to explain five contrastive tones in Thai words (Ketsiri, n.d.)

the word ‘neumes’, the earliest practical medieval music notations (Aubert, 2012). In music, neumatic elements define and explain syllables as a sequence of notes sung in a connected manner and forming a certain entity (Structure of Gregorian chant notation, n.d.). They are evaluated according to the principle of time length as follows: (a) at least two notes which have one time length and (b) a note characterized by flexible time length (Kampen, 2012). In relation to singing, neumatic singing is one of the categories of syllabic density which relates to the stress on a word syllable. Syllabic density can be divided into four groups: (1) recitative: many syllables sung by one note, (2) syllabic: one syllable sung by one note, (3) neumatic: one syllable sung by 2-3 notes or more, and (4) melismatic: one syllable sung by several notes or a series of notes. Differences in syllabic density are necessary for the melody line of lyrics and meaning (Mahrt, 2006; Miller & Shahriari, 2006).

This article presents the synthesis of an important skill for correct pronunciation in Thai popular singing. The main questions are, “What is the characteristic of neumatic singing of Thai popular singing?”, and “How neumatic singing reflects the relationship between tonal language and music?”

METHOD

The time scope of the study concerns Thai popular singing from the period of 1925 – 1967. The year 1925 was considered the beginning of Thai popular singing, the singing style which gradually developed

through the period of time. Thai popular singing improved continually until it became the high quality singing which resembled the singing style of Western popular music. The year 1967 marked a significant change in a singing style. Big bands, which were previously the most popular music style, were succeeded in popularity by the smaller bands and rock bands. The change in the characteristics of the bands and the music genres significantly affected the singing style, resulting in the development of singing technique into a new direction. The year, therefore, marked the end of the time scope of the study. The sample of the study was selected from four entertainment businesses including the musical theatres, Thai films, big bands under governmental authorities, and private bands respectively. Twenty notable singers were selected by the Thai popular music experts, advisors and authors. Famous songs of each singer were listed by the authors and three to five songs from each singer were selected through the votes of the Thai popular music experts, advisors, and authors. Consequently, the sample comprised eighty-eight songs from twenty singers.

The melodies of the sampled songs were transcribed and the accuracy of the notes was checked. The neumatic singing sections were then observed from the notation. The categories of neumatic singing techniques were classified from the pronunciation of the linguistic tones and the movement of musical pitches. Consequently, the neumatic singing techniques were divided into two groups: the correct linguistic tone pronunciation and the incorrect linguistic

tone pronunciation. Moreover, the authors collected data through in-depth interviews with relevant individuals including national artists, former singers of Public Relations Department, singers of 'Luk-krung' style (a genre of Thai popular song), and the singers and composers of 'Sunthraphon band' (a famous band of Thai popular music during 1925-1967). The data derived from the interview were used to support the findings on neumatic singing. The authors compared the findings using the Western music theory as well as the related previous studies to discuss and to check the results by the triangulation method.

FINDINGS

The correct pronunciation is an important element for high quality singing because lyrics are important intermediaries for communication between singers and their audiences. When the singers utter song lyrics correctly and clearly, the audiences will hear and understand the meaning of such lyric meaning correctly while they are listening to music. If singers pronounce lyrics incorrectly and unclearly, the performance may fail because audiences cannot understand the lyrics in the song and they may lose their interest in listening to the music. In the early period of Thai popular music development, the method of singing was not adjusted to the correct pitch of tone mark of the lyrics. Later, the incorrect pronunciation was solved by professional singers who used neumatic singing to adjust the pitch of the tone mark.

This study of neumatic singing began with the selection of 88 sample songs recorded between 1925 – 1967 and sung by Prathum Prathiprasen, Chuangchan Chanthrkhana, Manee Sumonnat, Chamrut Suwakhonth, Manthana Molakun, Phensri Phumchusri, Uea Sunthonsanan, Suthep Wongkamheang, and Charinth Nanthanakhon. The finding indicated that the characteristics of neumatic singing of Thai popular songs can be divided into 6 types: (1) singing slides from the lower pitch up to the tone mark pitch of the lyrics, (2) singing slides from the higher pitch down to the tone mark pitch of the lyrics, (3) singing slides from the tone mark pitch of the lyric up to another pitch, (4) singing slides from the tone mark pitch of the lyric down to another pitch, (5) singing slides from the pitch of a syllable up to the next syllable, and (6) singing slides from the pitch of a syllable down to the next syllable. The term "neumatic singing" was used to refer to the technique. The word was borrowed from the theories of Western singing.

In addition to the mentioned categories of neumatic singing, the authors counted the number of neumatic singing technique used in each sample song. The number was calculated into percentages to understand the usage of each genre of neumatic singing. The frequencies of the usage of the neumatic singing were ranked: the 1st type (96.85%), followed by the 3rd type (94.39%), and the 4th type (70.36%). The neumatic singing technique was used less than 50% in the 2nd type (36.79%), the 5th type (21.23%), and the 6th type (17.37%) respectively. The

authors used the information to create the interview guide for the in-depth interviews. The finding indicated that the 1st and 2nd categories of neumatic singing were used to adjust the incorrect pronunciation of the early singers. When the singers pronounced a word syllable that matched the music but its sound did not match the tone mark of the word, they would try to sing two notes by sliding the pitch up or down to the tone mark pitch of the word. Therefore, neumatic singing was a skill that the early singers practiced by themselves because they wanted to pronounce Thai words correctly and the composers did not write the music notation to facilitate neumatic singing. Later, the composers realized the importance of selecting the lyrics which matched the melody of the music. If the chosen lyrics did not match the music, they would change the lyrics or the melody for the singers so that they may easily pronounce the words with the music.

As a result, this study focused only on the 1st and 2nd categories of neumatic singing. The example and the explanation of the relation between Thai linguistic tones and musical pitches were presented to demonstrate the connection between music and language. Moreover, it is revealed that the practice of neumatic singing had the

pattern which matches the acciaccatura, a species of grace note, indicated by a small note with its stem crossed through (Kennedy, 1994). The process of the 1st and 2nd categories of neumatic singing to solve the incorrect pronunciation consisted of (1) pronouncing a syllable of lyrics that did not match the tone mark pitch on the grace note with an oblique stroke through the stem, and (2) continually pronouncing from the grace note sliding up or down to the main note which matched the tone mark pitch of such syllable. Examples of neumatic singing in Thai popular music are as follows:

Example 1 in Figure 2, a singer wants to sing the syllable ‘k^háŋ’ which has a high level tone mark and is a syllable of the word ‘náǎm k^háŋ’ matching the English word ‘dew’. However, when the singer pronounces this syllable on a note ‘D’, its sound become ‘k^hāŋ’ which has a middle level tone mark and matches the English word ‘chin’, so the singer sings the increasing neumatic singing from a note ‘D’ to a note ‘E’ to pronounce the syllable ‘k^háŋ’ correctly while ‘D’ is the supertonic in C Major scale.

Example 2 in Figure 3, a singer wants to sing the syllable ‘sǔ:áj’ which has a rising level tone mark and matches the English word ‘beauty’. However, when the singer

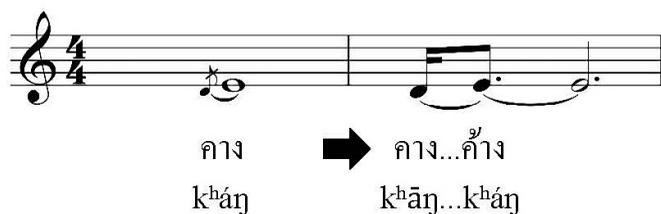


Figure 2. Example 1: The practice of increasing neumatic singing (1st type) of Thai popular music

pronounces this syllable on a note 'C', its sound become 'sū:āj' which has a middle level tone mark and matches the English word 'unlucky', so the singer sings the increasing neumatic singing from a note 'C' to a note 'A' to pronounce the syllable 'sū:āj' correctly while 'C' is the tonic in C Major scale.

Example 3 as shown in Figure 4, a singer wants to sing the syllable 'p^hī' which has a falling level tone mark and matches the English word 'elder sister or brother'. However, when the singer pronounces this syllable on a note 'A', its sound become 'p^hī' which has a middle level tone mark and matches the English word 'fat', so the singer sings the decreasing neumatic singing from a note 'A' to a note 'E' to pronounce the syllable 'p^hī' correctly while 'A' is the submediant in C Major scale.

Example 4 as in Figure 5, a singer wants to sing the syllable 'K^hām' which has

a falling level tone mark and matches the English word 'evening'. However, when the singer pronounces this syllable on a note 'F', its sound become 'K^hām' which has a high level tone mark and matches the English word 'word', so the singer sings the decreasing neumatic singing from a note 'F' to a note 'D' to pronounce the syllable 'K^hām' correctly while 'F' is the subdominant in C Major scale.

The examples demonstrated two issues concerning the connection between language and music. Firstly, the movements of the linguistic tone pitch and the musical pitch were coherent. In example 1, the linguistic tone of the word moved up from the middle tone to the high tone and the musical pitch moved up from D4 to E4. In example 2, the linguistic tone of the word moved up from the middle tone to the rising tone and the musical pitch moved up from C4 to A4. In example 3, the linguistic tone of the word

Figure 3. Example 2: The practice of increasing neumatic singing (1st type) of Thai popular music

Figure 4. Example 3: The practice of decreasing neumatic singing (2nd type) of Thai popular music

moved down from the middle tone to the falling tone and the musical pitch moved down from A4 to E4. In example 4, the linguistic tone of the word moved down from the high tone to the falling tone and the musical pitch moved down from F4 to D4. Secondly, the linguistic tone controlled the musical pitch. The correct pronunciation of the Thai linguistic tone was considered crucial in the Thai language and became the characteristic of neumatic singing in the Thai popular songs. The 1st and 2nd categories of neumatic singing concerned the movement of singing pitch from the incorrect linguistic tone to the correct one. This style of singing, therefore, created the new notes in the melody. As a result, changing the tone mark pitch of the lyrics not only affects the meaning of lyrics but also the pitch of the music. This is because when the tone mark pitch changes, the pitch of the music changes accordingly.

To conclude, neumatic singing in the Thai popular music was created from the characteristics of the language, which influence accents and melodies, resulting in the uniqueness of singing techniques. However, neumatic singing is merely a part of a musical sentence, which mostly consists

of the syllabic text setting with only several neumatic ones as presented in Figure 6.

The example demonstrates the syllabic text setting at ‘b1’ (middle and rising tone) and ‘b2’ (low, low, high, rising and falling tone) and the melismatic text setting at ‘c’ (middle tone). Neumatic singing was demonstrated at ‘d’ (from high to falling tone). The incorrect linguistic tone pronunciation was shown at ‘a1’ (incorrect: low tone – correct: falling tone) and ‘a2’ (incorrect: middle tone – correct: falling tone). Although neumatic singing was used to adjust the incorrect linguistic tone, the incorrect linguistic tone pronunciation continued to be found in some syllables. One of the reasons for this is that some composers do not want to change the melody of a song; thus, the singer has to sing according to the melody by pronouncing a syllable which does not match the tone mark pitch of the word. Moreover, some composers believe that audiences can understand the words and meanings of the words.

DISCUSSION

Neumatic singing was developed during 1925 – 1967 from the attempt of the singers to adjust the utterances of lyrics by

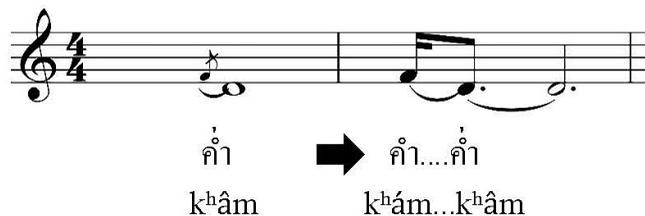


Figure 5. Example 4: The practice of decreasing neumatic singing (2nd type) of Thai popular music

musical notation

singing

นี่ ไคร นอ ไคร
ni k'raī nǒ k'raī
'a1' 'b1' 'c'

musical notation

singing

ซาง ประดิษฐ์คิด เพลง คำ คำ...คำ
tɛːsǎːŋ prà dít k'ɔ̄t p'hlǎŋ k'ám k'ám...k'ám
'a2' 'b2' 'd'

Figure 6. Example of the overall singing methods in Thai popular songs

considering the correct speaking or reading pronunciation principles. Therefore, the resolution of the problem involving the incorrect pronunciation of Thai popular singing was propelled from the verification of the correct pronunciation according to the language principle. This opinion corresponds to the results of Nakayama (2004) who mentioned that when Japanese letters were sung in the Western classical music style, the natural characteristic and different pronunciation of the Japanese language usually disappeared and the sounds of lyrics might be difficult to understand. The solution of the problem is to consider the verification of traditional Japanese singing based on cultural principles and language history and consequently check

the information to compare with Western style vocalization.

To analyze the characteristics of neumatic singing in Thai popular music, the correct linguistic tone pronunciation was focused upon. The linguistic tone is a major component of a word in tonal languages which affects the meaning of a word. When the tone mark of a word which consists of the same initial consonant, vowel and final consonant changes, the meaning of the word also changes. This characteristic is not present in non-tonal languages such as English because it consists of consonants and vowels without tone marks (Alderson, 1979; James, 2006; Musk, n.d.). Therefore, changing the tone of a word in the English language bears no effect on the meaning.

This opinion corresponds with Grasu (2015) who mentioned that tone change in English could be pronounced with a downward or upward pitch, it might convey information about the emotion of the singers but it did not indicate anything or affect the meaning of the word.

The findings in this study revealed that neumatic singing reflected the connection between language and music since different linguistic tone pronunciations resulted in the coherent change in musical pitch. This relation was divided in to two issues: (a) the similar direction of linguistic tone and musical pitch and (b) neumatic singing in one syllable which was created by raising the pitch to the correct linguistic pronunciation. Neumatic singing consequently created a new note. The finding indicated that the prosody of the Thai language was an important factor which influenced the creation of melodic style in Thai popular music. This finding was coherent with a number of studies concerning the relation between language and music. Proto (2015), for instance, mentioned that in order to create the lyrics into music, the speech units and musical pitches should be coherent with the singing idiom. The way features of speech such as stress, pitch and vowel length interact with the features in music, for example beats, intervals and durations is beneficial to the prosody, intonation, and rhythm in language and the relation with music. Ketkaew and Pittayaporn (2014) mentioned that pitch was an important element in both language and music. In languages, pitch is used to

convey different levels of meaning at the lexical, sentential, attitudinal, emotional levels among the others. In music, the pitch serves the melodic structure, whether played on instrument or sung by voice, in order to express meaning to the listener. Kirby and Ladd (2016) studied the relation between the linguistic tone and the musical melodies. The finding of the study indicated that there were three characteristics of Vietnamese tone-melody correspondence: the similar motion (77%), the contrary motion (4%) and the oblique motion (19%). The percentages indicated that the majority of linguistic tone pronunciation moved in the same direction as the musical pitches. Ho (2006) mentioned that matching two linguistic tones with the music was the pitch movement from one tonal endpoint to another which was coherent with the musical pitches. This finding indicated that the singing technique in the study was similar to the characteristic of neumatic singing in Thai popular music.

Neumatic singing is an important aspect for singers who are interested in studying and practicing Thai popular singing. This skill can be applied to correct Thai pronunciation according to the language principle. This knowledge should be encouraged and disseminated widely through a variety of processes including (1) designing exercises and textbooks of Thai popular singing for Thai and foreign singers to practice this skill correctly, (2) including knowledge of this skill in the curriculum of music education, and (3) writing musical notation of the neumatic

singing of syllables that are pronounced incorrectly to ensure that the singing and melodic accents of Thai popular songs are clear. Moreover, future research should study (a) neumatic singing of Thai popular music in depth, particularly the connection between each tone mark of the Thai language and music pitch to better comprehend the movement of the melody and the interval of acciaccatura and (b) similarities and differences between the characteristics of neumatic singing of each Thai popular singer and the singing method of each music style.

CONCLUSIONS

An essential skill to correctly pronounce the words in Thai popular singing is the neumatic singing. Its pattern matches the acciaccatura as one of the ornamentations in a piece of music. This skill occurs from the examination of the linguistic data and the effects on the connection between language and music. If the tone mark pitch of the Thai language changes, then the music pitch will accordingly change. Therefore, the melodic style of Thai popular singing comes from the characteristics of the Thai language. Although the early Thai popular singers practiced singing without the knowledge of Western popular singing, their desire to preserve the identity of Thai language and culture urged them to develop the neumatic singing method and improved it until it became an important element of high-quality singing. Neumatic singing, which is considered an advanced singing technique,

has been used in the singing of Thai popular music up to the present day.

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What Drives the Volatility of Metal Market? The Role of World Oil Price and US Factors Volatility

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ABSTRACT

This paper examines the effect of world oil price and the US factors volatility on the volatility of returns for three precious metals (gold, silver, and copper) using daily data for the period of January 2010 to April 2017. The volatility of all variables was constructed using a generalized autoregressive conditional heteroskedasticity (GARCH) approach. Next, an autoregressive distributed lag (ARDL) model was used in examining the relationship between the volatility of returns for these three metals on the volatility of world oil prices and US factors. The main results revealed that there was a cointegration relationship (long-run co-movement) between the volatility of returns (gold, silver, and copper) and the volatility of world oil price and US factors. In the long run, the volatility of the US factors was statistically significant in influencing the volatility of all metals,

however the volatility of world oil price only significant to influence the volatility of silver and copper, but not the volatility of gold. In the short run, the volatility of world oil price and US factors were statistically significant in influencing the volatility of gold, whereas, for silver, all variables were significant except for the US Dollar Index. For copper, all variables were statistically significant except for world oil prices and the US Dollar Index. Therefore, these results have provided more essential information for investors, fund managers,

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businesses and central bankers in managing their portfolio diversification, hedging purposes, and international reserve.

Keywords: ARCH, ARDL, GARCH, metals volatility, oil price volatility, US factors volatility

INTRODUCTION

Precious metals (gold, silver, and copper) have received much attention by the investors and researchers due to the fact that the world metal prices have increased at a historically high level during a commodities boom (the year 2006-2012). These three coinage metals are most traded in the global metals market in terms of their turnover. In particular, gold and silver have been important coinage metals before the 19th century and later replaced with nickel-made coins and paper notes. Now, they are used in jewelry and also serves as an international reserve and investment assets for investors.

The high uncertainty in the world financial markets over three decades ago has witnessed that international investors have to rebalance their portfolio investment to a safe asset like precious metal. The main attractiveness of investment in precious metals is they have a low correlation with other assets. In addition, since investors have lost their confidence for investment in the stock markets due to suffered steep losses, the panic of high volatility and contagion effect in the world financial markets, thus this development has led the investors to consider alternative instruments to hedge increasing risk in their portfolio. In fact, the European sovereign debt crisis and

the role of China and Russia are also playing an important role in the world metal market, in particular, an investment in gold in order to stabilize their economy.

Given this current development in the world metal market, therefore there are several reasons why this study is important. First, gold, silver, and copper are counted among the most valuable commodities worldwide, in which these precious metals also can be used as an industrial commodity or as an investment. Second, investors include gold and silver in their portfolio because it is durable and acts as a hedging tool or safe haven against the uncertainty of financial assets especially after the global financial crisis in 2007/2008. This is because, after the global financial crisis the demand for the precious metal has increased due to the uncertainty in the world financial asset and a significant decline in the world equity markets value in 2000, and most recently as a result of the credit and stock market instability following the global financial crisis of 2007. Therefore, investors had switched their portfolio investment from financial assets to precious metals, in which they believed that investment in metals was relatively stable and more lucrative than a financial asset (stock and bond).

Third, gold and silver are used as coinage metals, and the gold reserve is held by the central banks of many countries worldwide in order to store value or for use as a redemption medium. Therefore, the central bank has also held a significant proportion of gold as an international reserve in strengthening diversification and

insurance against unexpected market turmoil (Tully & Lucey, 2007). The idea behind this procedure is that gold reserves will help secure and stabilize the countries' respective currencies. Thus, a good understanding of what drives the volatility of precious metal is important to the investors in managing their investment portfolio (example, diversify their portfolio), and to the central bank in managing their international reserves in stabilizing their currency and international settlement. Fourth, for copper, it carries a major role in global economic growth and copper price act as one of the leading economic indicators to market participants. Copper has been widely used in the making of electrical conductors and one of the essential construction materials because of its electrical conductivity and corrosion-resistant properties.

Thus, based on these motivations, the focal point of this paper is to examine the determinants of volatility for three precious metals (gold, silver, and copper) by focusing on the role of world oil price and US factors volatility. The major contributions of this paper have three aspects. First, this study used all the family of ARCH-GARCH model in constructing the more accurate of the conditional variance (volatility) for all variables of interest. Second, this paper considers the role of world oil price and the US factors volatility in modeling the determinants of metal return volatility for three precious metal markets (gold, silver, and copper) using a most recent data set. Third, this study uses the ARDL model in modeling the determinants of volatility for

each metal market to examine the long-run co-movement (cointegration), and long-run and short-run effect of the volatility of the world oil price and US factors upon the volatility of returns for each metal market.

This paper is organized as follows. Section 2 provides a brief discussion of the literature review, whereas section 3 describes the research methodology used in this study namely GARCH methodology and ARDL model. Section 4 summarized the main empirical findings, and finally, section 5 concludes and discusses some related policy implications.

LITERATURE REVIEW

The past literature on the volatility of metal markets has gained special attention from the previous researcher especially during the recent commodities boom from 2006 to 2012. For example, Hammoudeh and Yuan (2008) examined the volatility behavior of three precious metal namely gold, silver and copper, in the presence of crude oil and interest rate shocks. The main results using standard GARCH models suggested that gold and silver had almost the same nature of volatility (persistence) in which is greater than the volatility of copper. However, using the EGARCH models, the main results suggested that the leverage effect was present and significant for copper only, which implied that investment in gold and silver could be good in anticipation of bad times. In addition, past oil shock does not impact all three metals similarly, whereas monetary policy has a significant effect on precious metals but not on copper

if the treasury bill rate is used as a monetary policy variable. Another study by Du (2012) had estimated the volatility of gold price, silver, and platinum using daily spot prices for the period of 1996-2011. The main result showed that the EGARCH model had outperformed the standard GARCH model in forecasting the volatility. Tang (2010) modeled the conditional volatility of aluminum and copper in daily and weekly spot price returns, and the main findings revealed that the regime-switching models with GARCH had outperformed the standard GARCH models in predicting the degree of volatility.

A recent study by Arouri et al. (2015) used several multivariate GARCH models to investigate the effect of the volatility of gold price returns on Chinese stock market returns. The result showed that the estimation using the VAR-GARCH model was the best performing model to determine the hedging ratio and suggested that investment in gold could be considered to increase the effectiveness of portfolio diversification by the addition of gold. Behmiri and Manera (2015) investigated the role of outliers and oil price shocks in the volatility of ten metals by using GARCH and Glosten, Jagannathan and Runkle-GARCH (GJR-GARCH) models. The findings showed removal of outliers improved the GARCH performance in estimating volatility. In terms of leverage effect, copper has the existence of leverage effect and no leverage effect for nickel and palladium. Sinha and Mathur (2013) examined the volatility of five base metals

in the return series by using GARCH models. The result indicated that there was a presence of persistence in metal price volatility. The findings also implied that volatility of the equity market had influences on weekly price volatility of future contract of aluminum, lead, and zinc while did not influence on copper and nickel.

There are pieces of literature that have examined the relationship between metal prices and explanatory variables in the long run or short run. For example, Zhang and Wei (2010) analyzed the relationship between gold and crude oil prices. The results found the influence of crude oil price movement was higher than the gold price movement on economic growth and both prices had no significant nonlinear Granger causality to each other. Yusupov and Duan (2010) explored the long-run relationships between seven base metals, gold, and oil using daily spot prices that had covered the period 1995-2010 using the Johansen cointegration and VEC Granger causality approach. The findings showed the existence of several cointegrating relationships among the base metals, gold, and crude oil, however, did not prove any cointegration to each other in which helped the benefit from diversification between asset. In addition, aluminum and copper had appeared significant to Granger-cause other commodities. Bildirici and Turkmen (2015) explored the relationship between oil, gold, silver and copper returns in Turkey using nonlinear ARDL and augmented nonlinear Granger causality approach. The results concluded that there was the

existence of a long-run relationship between oil return and the return of gold and silver, and the movement of world oil return had a significant impact on gold return in the short run.

Some study for example Celik (2016) had examined the relationship between dollar exchange rate, gold price and grape production in Turkey during the period 1950-2015 using an ARDL approach. The results revealed that the existence of a long-run relationship among variables and found that the negative relationship between the grape production and dollar exchange rate, whereas a positive relationship between the grape production and gold price. Le and Chang (2011) employed the ARDL bounds testing approach to investigate the relationships between two global significant commodities (oil and gold) and the financial variables (interest rates, exchange rates, and stock prices) in Japan's perspectives. The results showed the gold price had a significant impact on the interest rate and yen in the long-run and short-run and suggested that the investors included gold in their portfolio investment.

Thus, based on this background, this study contributes and fills the literature gap in certain aspects. First, since there is comprehensive study on the determinants of volatility in equity and commodity markets (for example, Brunetti & Gilbert, 1995; Fernandez, 2008; Gilbert, 2006; Kroner et al., 1993; Pindyck, 2004), however, there is a limited evidence in explaining the determinants of volatility for a single precious metals. Therefore, understanding

the main factors that reflect the volatility of precious market are important in managing risk and return of portfolio investment. Second, this study utilizes a more recent data set using the GARCH approach in constructing the volatility for all variables, and then estimate the determinants of the volatility for three precious metal using ARDL method.

METHOD

Volatility modeling is an important aspect for market participants in managing their portfolio risk and return. Variance or standard deviation is often used as the risk measure in commodities market behavior. Thus, this section will summarize the volatility model in order to construct the conditional variance, and then discuss the ARDL model in analyzing the effects of world oil price and US factors volatility upon the volatility of each precious metal (gold, silver, and copper).

Volatility Models

GARCH Model. GARCH model was introduced by Bollerslev (1986) which included the lagged of conditional variance terms to forecast the variance equation. The general GARCH (p, q) model can be written as follows:

$$h_t = \gamma_0 + \delta_1 h_{t-1} + \lambda_1 \mu_{t-1}^2 \quad (1)$$

In equation [1], the value of variance scaling parameter (h_t) now depends on both the past value of the shocks, which are captured by the lagged squared residual terms (μ_{t-1}^2) and on the past value of itself,

which is captured by lagged h_t terms (Y_t).

GARCH-M Model. GARCH-M model or GARCH in mean allows the conditional mean (Y_t) to depend on its own conditional variance (h_t). Therefore, the GARCH-M (p,q) model has the following form:

$$Y_t = \beta_0 + \beta'X_t + \theta h_t + \mu_t \tag{2}$$

$$h_t = \gamma_0 + \sum_{i=1}^p \delta_i h_{t-i} + \sum_{j=1}^q \gamma_j \mu_{t-j}^2 \tag{3}$$

EGARCH Model. Nelson (1991) proposed the exponential GARCH or EGARCH model to capture the asymmetric response of returns with the following specification of the variance equation:

$$\log h_t = \gamma + \sum_{j=1}^p \zeta_j \left| \frac{\mu_{t-j}}{\sqrt{h_{t-j}}} \right| + \sum_{j=1}^q \varepsilon_j \frac{\mu_{t-j}}{\sqrt{h_{t-j}}} + \sum_{i=1}^p \delta_i \log(h_{t-i}) \tag{4}$$

Where γ , ζ_j , ε_j and δ_i are parameters to be estimated. The left-hand side is the log of the variance series. This makes the leverage effect exponential instead of quadratic, and therefore the estimate of the conditional variance is guaranteed to be non-negative. The EGARCH model allows for the testing of asymmetries as well as the TGARCH model. To test for asymmetries the parameters of importance are the ε_j . If $\varepsilon_1 = \varepsilon_2 = \varepsilon_3 \dots = 0$, then the model is symmetric. When $\varepsilon_j < 0$, then positive shocks (good news) generate less volatility than negative shocks (bad news).

EGARCH-M Model. EGARCH-M model is known as Nelson’s EGARCH model in which includes standard deviation into

the mean equation. This model has extra capabilities to determine the risk premium from the study variables.

TGARCH Model. A major restriction of the ARCH and GARCH specifications is that both models are assumed that shocks are symmetric. Thus, the threshold ARCH (TARCH) model by Zakoian (1994) and threshold GARCH (TGARCH) by Glosten et al. (1993) are developed to capture asymmetries in terms of negative and positive shocks. To do that, it simply adds into the variance equation a multiplication dummy variable to check whether there is a statistically significant difference when shocks are negative. Thus, the specification of the conditional variance equation for TGARCH (1,1) is written as follows:

$$h_t = \gamma_0 + \gamma \mu_{t-1}^2 + \phi \mu_{t-1}^2 d_{t-1} + \delta h_{t-1} \tag{5}$$

Where, d_t takes the value of 1 for $\mu_t < 0$, and 0 otherwise. So, ‘good news’ and ‘bad news’ have a different impact. Goods news has an impact γ , while bad news had an impact ϕ . If $\phi > 0$, we conclude that there is asymmetry, while if $\phi = 0$ the news impact is symmetric.

Autoregressive Distributed Lag (ARDL) Model

In modeling the relationship between the volatility of returns for individual precious metal upon the volatility of world oil prices and US factors, this study used an ARDL method as proposed by Pesaran et al. (2001). The advantage of the ARDL model is this technique can examine the cointegration

(long-run co-movement) between variables whether the time series variables are stationary at I(0), or purely I(1), or mixtures of I(0) and I(1) for particular variables. This technique is also applicable to the short sample period.

The ARDL technique has three steps. First, we used the Bound testing approach in investigating the co-movement (cointegration) between variables using ARDL (p, q, r, s, t) model as follows:

$$\begin{aligned} \Delta VOLM_t &+ \beta_4 VSP500_{t-1} + \beta_5 VUS10Y_{t-1} + \sum_{i=1}^p \lambda_1 \Delta VOLM_{t-i} \\ &+ \sum_{i=0}^q \lambda_2 \Delta VOIL_{t-i} + \sum_{i=0}^r \lambda_3 \Delta VDX_{t-i} \\ &+ \sum_{i=0}^s \lambda_4 \Delta VSP500_{t-i} + \sum_{i=0}^t \lambda_5 \Delta VUS10Y_{t-i} + \varepsilon_t \end{aligned} \tag{6}$$

In equation (6), VOLM is the individual volatility of precious metal (gold, silver, and copper), VOIL is volatility of oil price, VDX is the volatility of the US Dollar Index, VSP500 is the volatility of Standard & Poor 500 Index, and VUS10Y is the volatility of 10 years of the United States government bond. The model in equation (6) is estimated separately for each volatility of precious metal (gold, silver, copper). The selection of the optimal lag orders of the ARDL models was based on the lowest value of the Schwarz criterion (SC).

To test whether cointegration is established or not, the computed Wald test (joint test or F test) from equation (6) need to compare with the critical value (normally for case III) as proposed by Pesaran et al. (2001). If the estimated F-statistics fall above the upper bound of the critical values,

then the null hypothesis of no cointegration is rejected. Likewise, if the estimated F statistics are falling below lower bound then the null hypothesis cannot be rejected. If the estimated value falls inside the critical value band, the result is inclusive. The hypothesis to test the existence of cointegration or not is as follows:

$$H_0 : \beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = 0 \tag{7}$$

$$H_A : \beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq \beta_5 \neq 0 \tag{8}$$

If the F-statistics is above the upper bound critical value, the null hypothesis (H_0) will be rejected and indicates the existence of cointegration. If the F-statistics fall below the lower bound critical value indicates no cointegration exists while F-statistics fall between the upper and lower bound critical value then it is inconclusive among variables.

The second step, once the cointegration is confirmed, the long-run relationship between the volatility of metal and the volatility of world oil price and US factors can be estimated using long-run ARDL (p, q, r, s, t) as follows:

$$\begin{aligned} VOLM_t &= \beta_0 + \sum_{i=1}^p \beta_1 VOLM_{t-i} + \sum_{i=0}^q \beta_2 VOIL_{t-i} + \sum_{i=0}^r \beta_3 VDX_{t-i} \\ &+ \sum_{i=0}^s \beta_4 VSP500_{t-i} + \sum_{i=0}^t \beta_5 VUS10Y_{t-i} + \varepsilon_t \end{aligned} \tag{9}$$

The long-run model in equation (9) is important in generating the error correction term, in which the error correction from the long-run model is used to estimate the short model. Thus, the ARDL specification of the short-run dynamics can be derived by constructing an error correction model

(ECM) of the following form:

$$\begin{aligned} \Delta VOLM_t = & \beta_0 + \sum_{i=1}^p \beta_1 \Delta VOLM_{t-i} + \sum_{i=0}^q \beta_2 \Delta VOIL_{t-i} + \sum_{i=0}^r \beta_3 \Delta V DXY_{t-i} \\ & + \sum_{i=0}^s \beta_4 \Delta V SP500_{t-i} + \sum_{i=0}^t \beta_5 \Delta V US10Y_{t-i} \\ & + \varphi ECT_{t-1} + \varepsilon_t \end{aligned} \quad (10)$$

In equation (10), the parameter φ should fall between $-1 < \varphi < 0$, and it measured the speed of adjustment of the target variables during the short-run period to back to the long-run equilibrium after the shock.

Data

The data set were daily closing prices of gold, silver, copper, world oil price, US dollar index, S&P 500 and US 10 years bond yield, which contained 1 839 observations respectively. The data covered from 4 January 2010 to 28 April 2017. All data were collected from Datastream. World oil price (in US dollar per barrel) is reflected West Texas Intermediate (WTI) in which is used as a benchmark for crude oil pricing and traded on the New York Mercantile Exchange. Gold and silver prices are measured in US dollar per troy ounce, while the copper price is measured in US dollar per lbs. These three metals prices are traded in Chicago COMEX division of the New York Mercantile Exchange. US dollar index (DXY) is representing the strength of the US dollar against the basket of world major currencies including Euro, Japanese yen, British pound, Canadian dollar, Swiss franc, and Swedish krona. S&P 500 index is a stock market index representing 500 large United States companies in terms of market capitalizations that traded in the New York

Stock Exchange (NYSE) and NASDAQ. US government 10 years bond yield is traded under the supervision of the US Department of Treasury.

All data set except US ten years government bond are transformed into return series using the following formula:

$$R_t = \left[\frac{P_t}{P_{t-1}} - 1 \right] \times 100 \quad (11)$$

where P_t is the daily price at time t , and P_{t-1} is the previous price.

RESULTS AND DISCUSSION

Results of Volatility Model

Table 1 reports the estimation results of the volatility model for all variables. As can be seen from Table 1, for the gold returns volatility modeling, AR(1)-EGARCH (2, 2) is the most robust model among GARCH family models based on the lowest AIC value. The coefficients of α_1 , α_2 and β_2 are statistically significant at 1% significant level in which proves that volatility from the previous records has a significant impact on current uncertainty. For the estimation of silver returns volatility, AR (1)-TGARCH (2, 1) outperforms other GARCH family models based on the lowest AIC value. The coefficients of α_1 , α_2 and β_2 are statistically significant at 1% significant level in which indicates that the volatility from the previous records has a significant impact on current uncertainty. For copper returns volatility estimation results, AR (1)-TGARCH (1, 1) had the lowest AIC value shows the best estimation model among GARCH family models. The coefficients of α_1 and β_1 are statistically significant at 5% and 1% respectively in which indicates that volatility from the previous records has a

significant impact on current uncertainty.

The ARCH-LM test statistics under the GARCH estimation found do not exhibit an additional ARCH effect remaining in the residual of gold, silver and copper returns series. This shows that the variance equation in GARCH models' is well specified for the three metals. For serial correlation detection test, Ljung-Box Q-statistics found no serial correlation problem based on any lag order in the residual of gold, silver and copper returns. Lastly, all GARCH family models exhibit not normally distributed for all three metals data distribution as rejects the null hypothesis of normality at a 1% significance level based on Jarque-Bera statistics.

The next step after GARCH estimation is to extract the conditional variance for all variables as volatility series is investigating the relationship among the variables using

the ARDL approach. The selection of volatility series for all explanatory variables (world oil price, US dollar index, S&P 500 and US 10 years bond yield) are also based on the lowest value of the Akaike Information Criterion (AIC) among GARCH family models. The estimation results found that EGARCH-M (2, 2) is the best to represent the model for volatility series of world oil returns and the US dollar Index. Whereas, EGARCH-M (2, 1) is the best model to representing the volatility of the S&P 500 return, while TGARCH (1, 1) is the best model to representing the volatility of the US 10 years bond yield. However, the full results of the volatility tests for world oil price and US factors (US dollar index, S&P 500 and US 10 years bond yield) are not reported here in order to save the space. The full results are available upon request.

Table 1
Selected GARCH estimation results

Coefficients	Gold Returns				
	AR(1)-GARCH(2,1)	AR(1)-GARCH-M (2,1)	AR(1)-EGARCH (2,2) *	AR(1)-EGARCH-M (2,2)	AR(1)-TGARCH (2,1)
Mean					
μ	0.0001	0.0004	0.0001	0.0004	0.0001
AR(1)	-0.0191	-0.0193	-0.0178	-0.01779	-0.019609
λ		-0.0283		-0.02764	
Variance					
ω	1.58E-06***	1.58E-06***	-0.71058***	-0.7076***	1.55E-06***
γ			-0.0507***	-0.05066***	-0.00193
α (1)	0.0720***	0.0719***	0.1125***	0.1127***	0.07414***
α (2)	-0.0443***	-0.0441***	0.1049***	0.1054***	-0.0455***
β (1)	0.95851***	0.9585***	-0.0077	-0.0071	0.9589***
β (2)			0.947212***	0.947054***	
$\alpha+\beta$	0.9863	0.9862	1.157	1.1580	0.9876

Table 1 (Continued)

Coefficients	Gold Returns				
	AR(1)- GARCH(2,1)	AR(1)- GARCH-M (2,1)	AR(1)- EGARCH (2,2) *	AR(1)- EGARCH-M (2,2)	AR(1)- TGARCH (2,1)
Log Likelihood	5764.31	5764.33	5773.12	5773.15	5764.34
AIC	-6.2693	-6.2682	-6.2767	-6.2756	-6.2682
SIC	-6.2512	-6.2472	-6.2527	-6.2486	-6.2472
ARCH LM	1.5747	1.5645	2.1396	2.0579	1.6257
Q(6)	1.0126	0.9899	1.2775	1.2219	1.0006
Q(12)	5.0275	4.9956	6.0636	6.037	4.94
Q ² (6)	4.7914	4.7623	3.8258	3.744	4.8628
Q ² (12)	6.7462	6.6789	6.8206	6.7101	6.7419
J Bera	1036.35***	1031.62***	762.76***	757.05***	1037.83***
Coefficients	Silver Returns				
	AR(1)- GARCH(2,1)	AR(1)- GARCH-M (2,1)	AR(1)- EGARCH (2,1)	AR(1)- EGARCH-M (2,1)	AR(1)- TGARCH (2,1) *
Mean					
μ	-0.0001	0.0004	0.00006	-0.0005	0.00003
AR(1)	-0.090222***	-0.090308***	-0.082121***	-0.0829***	-0.090256***
λ		-0.02502		0.030062	
Variance					
ω	3.5E-06***	3.52E-06***	-0.2109***	-0.2095***	3.61E-06***
γ			0.0053	0.0054	-0.0162**
α (1)	0.1707***	0.1709***	0.3213***	0.3209***	0.1807***
α (2)	-0.1460***	-0.1464***	-0.2259***	-0.2251***	-0.1443***
β (1)	0.9669***	0.9669***	0.9819***	0.9822***	0.9639***
β (2)					
$\alpha+\beta$	0.9916	0.9916	1.0773	1.0779	1.0003
Log Likelihood	4609.69	4609.71	4609.01	4609.05	4611.41
AIC	-5.0122	-5.0111	-5.0104	-5.0093	-5.0129
SIC	-4.9942	-4.9901	-4.9894	-4.9853	-4.9919
ARCH LM	1.3567	1.3037	1.9435	2.0292	1.4337
Q(6)	2.3649	2.3802	2.5573	2.5103	2.3184
Q(12)	12.512	12.494	12.605	12.585	11.979

Table 1 (Continued)

Silver Returns					
Coefficients	AR(1)- GARCH(2,1)	AR(1)- GARCH-M (2,1)	AR(1)- EGARCH (2,1)	AR(1)- EGARCH-M (2,1)	AR(1)- TGARCH (2,1) *
Q ² (6)	3.5963	3.5137	3.8258	4.6435	3.9369
Q ² (12)	6.1	6.0017	6.8206	7.1615	6.4415
J Bera	560.18***	557.53***	623.97***	627.49***	584.71***
Copper Returns					
Coefficients	AR(1)- GARCH(2,2)	AR(1)- GARCH-M (2,2)	AR(1)- EGARCH (2,2)	AR(1)- EGARCH-M (2,2)	AR(1)- TGARCH (1,1) *
Mean					
μ	-0.000117	-0.0025*	-0.00032	-0.00291**	-0.00034
AR(1)	-0.019086	-0.02063	-0.01399	-0.0122	-0.02021
λ		0.186509*		0.198474**	
Variance					
ω	5.88E-08	4.45E-08	-0.48274***	-0.53987***	3.15E-06***
γ			-0.07987***	-0.07939***	0.056659***
α (1)	0.059572***	0.060299***	0.041012	0.041241	0.015644**
α (2)	-0.058423***	-0.05944***	0.158234***	0.158705***	
β (1)	1.872599***	1.880946***	0.25388**	0.243578*	0.94018***
β (2)	-0.874085***	-0.88206***	0.707582***	0.711335***	
$\alpha+\beta$	0.999663	0.999743	1.160708	1.154859	0.955824
Log Likelihood					
Likelihood	5275.165	5276.464	5282.728	5284.355	5283.364
AIC	-5.735617	-5.73594	-5.74276	-5.74345	-5.74563
SIC	-5.714599	-5.71192	-5.71874	-5.71642	-5.72762
ARCH LM	1.055871	0.915333	1.679471	1.845715	0.977346
Q(6)	4.1098	4.1438	3.8746	4.1704	4.3383
Q(12)	12.902	12.994	13.94	15.688	13.557
Q ² (6)	5.4201	5.5006	10.404	9.7648	6.0677
Q ² (12)	10.187	9.9527	14.003	13.288	9.7732
J Bera	74.69193***	74.29221***	64.6805***	66.57781***	58.09735***

Note: *, **, *** denotes 10%, 5%, 1% significance level respectively

ARDL Estimation Results

Table 2 reports the estimation result of the ARDL model using bound testing for each metal equation. The selection of optimal lag order for each ARDL model for gold, silver, and copper volatility series is determined by the minimum value of the Schwarz criterion. As can be seen from Table 2, the computed F-statistic is higher than the upper value of critical bound at the 1% significance level for all metals. This indicates that there is a cointegrating relationship (or long-run co-movement) among explanatory variables (the volatility of world oil price and US factors) upon the volatility of returns for gold, silver, and copper.

Table 3 summarizes the estimation results of the long-run elasticities for each metal market volatility. As can be seen from Table 3, the volatility of world oil price is negatively and statistically significant in influencing the volatility of silver at a 5% significant level, whereas the volatility of world oil price is not statistically significant

to influence the volatility of gold and copper. The volatility of the US dollar index is positively and statistically significant in influencing the volatility of silver and copper at a 1% significant level, whereas no significant impact on the volatility of gold. Specifically, 1% increase in the volatility of US dollar index lead to increase the volatility of silver by 9.03%, and for copper by 5.77%, in which indicates that the volatility of silver and copper price are very sensitive to the movement of US dollar. The volatility of the S&P 500 is positively and statistically significant to affect the volatility of gold and copper at a 5% significant level. In other words, a 1% increase in the volatility of the S&P 500 lead to an increase in the volatility of gold by 0.23%, and 0.83% for copper. The volatility of US 10 years bond yield has a positive and significant relationship with the volatility of gold and silver at 10 % and 1% significant level respectively, while no significant impact on the volatility of copper. Based on the result it shows that a 1% increase of the volatility of the US 10

Table 2
Bound test results

Model	Maximum Lag	Lag Order (a,b,c,d,e)	F Statistic
Gold	4	(4,0,1,0,2)	7.7896***
Silver	4	(4,2,0,0,2)	27.9214***
Copper	4	(2,1,1,1,0)	8.9661***
Critical Values For F Statistic		Lower Bound, I0	Upper Bound, I1
	10%	2.45	3.52
k=4	5%	2.86	4.01
	1%	3.74	5.06

Note: *, **, *** denotes 10%, 5%, 1% significance level respectively

Table 3
Long-run elasticities results

Variables	Coefficients		
	Gold (4,0,1,0,2)	Silver (4,2,0,0,2)	Copper (2,1,1,1,0)
Oil	0.0053	-0.1176**	-0.0369
US Dollar Index	-0.2553	9.0272***	5.7657***
SP500	0.2338**	0.2256	0.8271***
US 10Y Bond Yield	0.0512*	0.1819***	0.0046
C	0.00007***	0.0001***	0.000005***

Note: *, **, *** denotes 10%, 5%, 1% significance level respectively

years bond yield leads to an increase in the volatility of gold by 0.05%, and silver by 0.18%.

Table 4 summarized the estimation results of the short-run ARDL model for each metal market volatility. As can be seen from the table, in the short run, the volatility of world oil price, US dollar index, US 10 years bond, and S&P500 are positively and statistically significant in influencing the volatility of gold at least at 10% significant level. In the short run, the volatility of the US dollar index plays a major role in which a 1% increase in its volatility leads to an increase in the volatility of gold price

by 1.27%. For the volatility of silver, only the volatility of world oil price and US 10 years bond yield are statistically significant, whereas the volatility of the US dollar index and S&P500 are not significant. In contrast, the volatility of copper is only significantly influenced by the volatility of S&P500.

The lag optimum of the short-run model is identified using the minimum value of the Schwarz criterion. Thus, the coefficient in Table 4 is representing the sum of the coefficient for all explanatory variables. In terms of error correction, the coefficients of the ECT for the volatility of gold, silver, and copper are -0.05, -0.32 and -0.03

Table 4
Short-run model results

Dependent Variable	Independent Variables				
	Short Run				
	Oil	US Dollar Index	SP500	US 10 Years Bond Yield	ECT(-1)
Gold	0.0074**	1.2698***	0.0225*	0.0502***	-0.0511***
Silver	0.1314***	6.1008	0.2499	0.3472***	-0.3225***
Copper	0.0091	0.5212	0.0347*	-0.0037	-0.0341***

Note: *, **, *** denotes 10%, 5%, 1% significance level respectively. The significant level is determined using the Wald statistic (joint restriction).

respectively and statistically significant at 1% significance level. This indicates that about 5%, 32% and 3% of the disequilibrium for gold, silver, and copper respectively are adjusted on the next day to meet the long-run equilibrium of the metal volatility.

Discussion

Since the sum of the two estimated ARCH and GARCH coefficients ($\alpha_1 + \alpha_2 + \beta_1 + \beta_2$) is more than one for gold return series, this finding indicates that the conditional variance is exponentially increasing over time. The negative coefficient of γ (leverage effect) is statistically significant at a 1% confidence level indicates that negative shocks imply a higher next period conditional variance than positive shocks and leverage effect exist in gold returns series.

For the silver return series, the sum of the two estimated ARCH and GARCH coefficients ($\alpha_1 + \alpha_2 + \beta_1$) is closer to one in which indicates that conditional variance is persistent. The negative coefficient of γ (leverage effect) is statistically significant at a 5% level in which shows that the negative shocks imply a higher next period conditional variance than positive shocks and leverage effect exist in silver returns series. The same findings are found for copper return series in which shows that the two estimated ARCH and GARCH coefficients ($\alpha_1 + \beta_1$) are closer to one indicates that conditional variance is persistent. The negative coefficient of γ (leverage effect) is statistically significant at a 1% significant level indicates that negative shocks imply a higher next period conditional variance than positive shocks

and leverage effect exist in copper returns series.

The main results from Bound tests revealed that there was a long-run co-movement (cointegration) among all explanatory variables (the volatility of world oil price and US factors) upon the volatility of returns for gold, silver, and copper. This findings signal that all explanatory variables are moving together towards the long equilibrium of the volatility of return series for all precious metals, and therefore the investor can use this information to manage their risk and return of their investment portfolio in the precious metals. The investor also needs to observe the volatility of world oil price and US factors accordingly before making their investment decision in the potential precious metal.

SUMMARY AND CONCLUSIONS

The focal point of this paper is to model the volatility of returns for three precious metals by focusing on the role of world oil price and US factors volatility. The volatility model is estimated using the GARCH model in constructing the conditional variance, and then the ARDL model is used in modeling the determinants of volatility for the three precious metals.

The new findings of this study can be summarized into three aspects. First, there is a long-run co-movement (cointegration) between the volatility of all precious metal (gold, silver, and copper) on its determinants (volatility of world oil price and US factors). Second, in the long run, the effects of world oil price and US factors volatility upon the

volatility of precious metals are differed according to the type of metal, and the volatility of the US dollar plays a major role in influencing the volatility of silver and copper. Third, in the short run, the volatility of gold is statistically significantly influenced by the volatility of all explanatory variables, whereas the volatility of silver has only significantly influenced by the volatility of world oil prices and US government bonds. In addition, the volatility of copper only significantly influenced by the volatility of the US stock market.

However, there are some differences in this empirical study as compared with the previous study. For example, Batten et al. (2010) found that macroeconomic determinants (business cycle, monetary environment, and financial market sentiment) played a different role in the price volatilities of four precious metal (gold, silver, platinum, and palladium price). Gold volatility is shown to be explained by monetary variables, but this is not true for silver. Overall, there is limited evidence that the same macroeconomic factors are jointly influenced by the volatility process of the four precious metals. Another studied by Soytaş et al. (2009) in Turkey argued that the movement of world oil prices had no predictive power of precious metal prices (gold and silver). Thus, these findings suggest that domestic gold is also considered a safe haven in Turkey during the devaluation of the Turkish lira.

The policy implications of this study can be summarised as follows. First, for the investors and market participants

in the metal market, understanding the nature of volatility and its determinants are important in managing the risk and return of their investment portfolio, and also acts as a hedging instrument against the uncertainties of other financial assets and inflation. Second, for the central bankers, by understanding the nature of volatility and its determinant, this will help the monetary authority to intervene in the world metal market in stabilizing their international reserve and currency. For example, the central bank may also use gold to stabilize currency value during the high volatility of national currency due to speculative activities. Third, for the manufacturer especially silver and copper business-related companies, understanding the volatility and its determinant may help them to manage their inventory strategies for business activities.

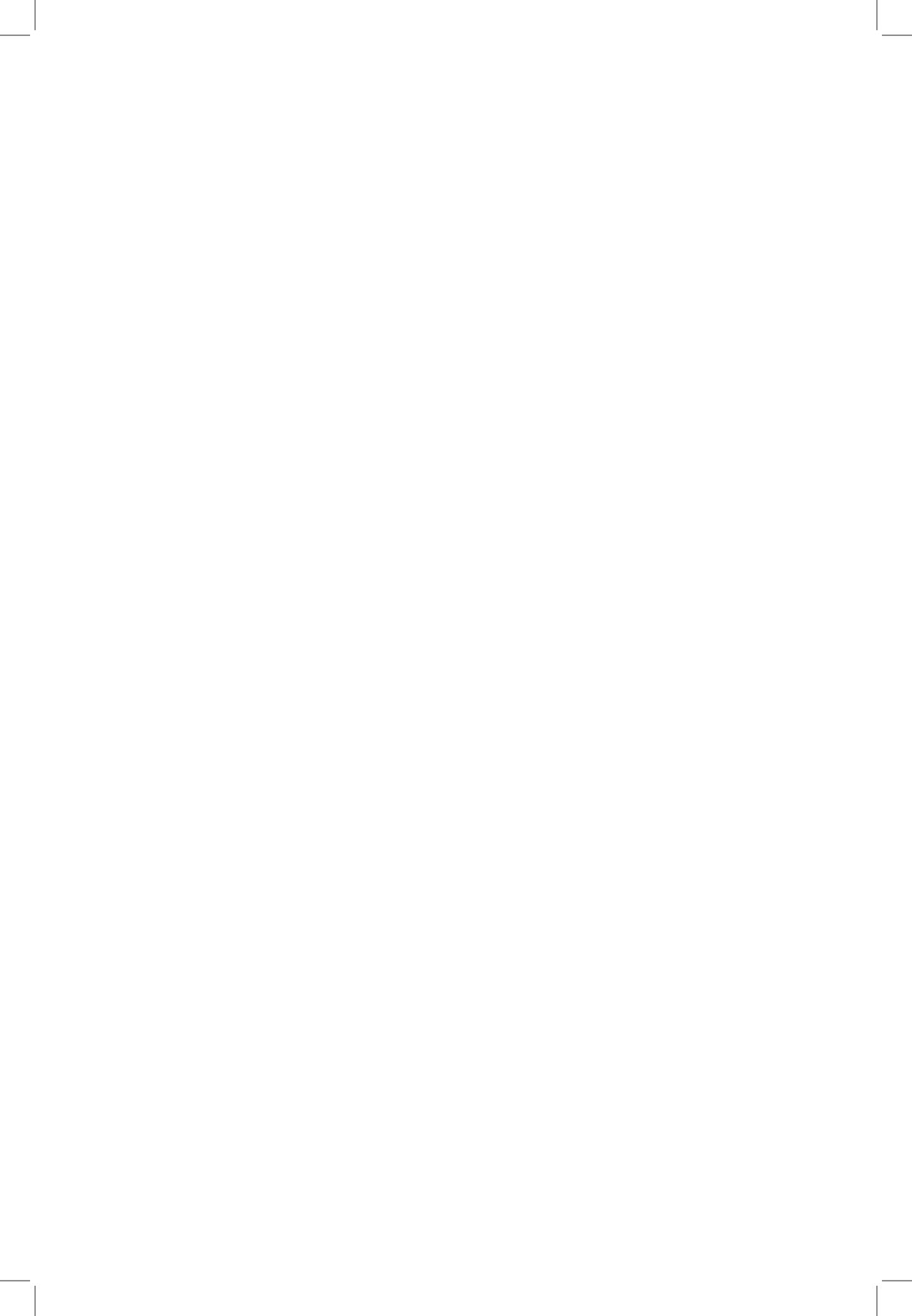
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Does Islamic Banking Matter in Transmitting Monetary Policy? Empirical Evidence from Indonesia and Malaysia

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ABSTRACT

As an interest-free banking system shows tremendous growth in many countries nowadays, the question of how Islamic banks contribute to monetary policy transmission is increasingly important for policymakers. This study aims to investigate and compare the role of Islamic banks in transmitting monetary policy to the real economy in Indonesia and Malaysia, two countries with established dual banking systems and a growing number of Islamic banks. To achieve its objective, the study relied on Impulse Response Functions and Variance Decomposition Analysis, based on Vector Autoregressive (VAR) methodology. The model consisted of four variables (Islamic banks' deposits, Islamic banks' financing, overnight interest rates, and economic output), while the monthly data used cover the period between January 2007 and December 2016. The principal conclusion is that deposits and financing of Islamic banks play an important although a modest role in transmitting monetary policy to the economies of Indonesia and Malaysia. A plausible explanation of this result is the relatively low market share of Islamic banks in both countries. Additionally, the lower significance of Islamic financing in Malaysia, compared to Indonesia, is due to Malaysia's smaller proportion of profit-loss sharing (PLS) financing. As a result, PLS financing has a smaller impact on Malaysian economic growth. The results suggest that to enhance their

economic impact, Islamic banks need to increase their PLS-based financing. This study overall findings contribute to policy information about how Islamic banks can contribute to achieving both economic and monetary policy goals in Indonesia and Malaysia.

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INTRODUCTION

Over the last few decades, Islamic banking has shown tremendous growth, not only in Muslim countries but worldwide. The Islamic Financial Services Industry Stability Report 2018 (Islamic Financial Services Board, 2018) reported that the assets of the global Islamic finance industry have surpassed USD 2 trillion in its three main sectors (banking, capital markets and insurance/takaful). This marks 8.3% growth and reverses the preceding two years of near-stagnation of the asset value of USD 1.89 trillion in 2016 and USD 1.88 trillion in 2015. The massive development of Islamic banking is believed to be related to its unique characteristic as an interest-free banking system, which makes it more stable and more influential for economic growth than a conventional banking system (Farooq & Zaheer, 2015).

Like conventional banks, Islamic banks are affected by a country's economic policies, including monetary policy. Indeed, monetary policy is one of the most important methods for managing money supply and liquidity, which tie closely to economic developments. Monetary policy influences the economy in various ways, including the regulation of interest rates, exchange rates, bank credit, and asset prices (Mishkin, 2010).

Bank credit often is considered a significant intermediary in monetary policy, inseparable from the banking sector's crucial role as a financial intermediary (Mishkin, 2010). Islamic banks, in contrast, have several different characteristics that

alter their role in monetary policy. Because it deals with real assets, Islamic banks' interest-free monetary system transmits monetary policy more consistently to the economy than conventional monetary systems, which are heavily linked to fluctuating interest rates (Yusof et al., 2009).

Several previous studies have examined the Islamic banking sector's effectiveness in channelling monetary policy to the real economy. A number of studies investigate the impacts of monetary policies in Muslim countries, such as in Malaysia (Kassim et al., 2009; Sukmana & Kassim, 2010), Indonesia (Ascarya, 2012, 2014), Turkey (Hakan & Gulumser, 2011), and Pakistan (Naveed, 2015). In general, all of these studies concluded that Islamic banks play a positive role in monetary policy transmissions. However, they also found an interesting yet conflicting result. While Islamic banks' balance sheets are more sensitive to interest rate shocks compared to those of conventional banks in Malaysia (Kassim et al., 2009), the opposite is found in Pakistan (Naveed, 2015). This raises a question about the real impact of monetary policy on Islamic banks and the effectiveness of Islamic monetary transmission in different countries. However, despite the important insights produced regarding how a country should conduct monetary policy effectively in a dual-banking system, only a few studies have attempted this type of cross-country analysis. Indeed, a cross country analysis would also allow thorough analysis about the existence of Islamic bank lending channel as well as the factors that allegedly make

the difference on the effectiveness. Previous studies generally have not considered this question.

This study aims to investigate and compare the role of Islamic banks in channelling monetary policy to the real economies of Indonesia and Malaysia. These countries were chosen because they have an established dual-banking system and rapidly growing Islamic banks¹. Analyzing this issue in several countries will reveal new evidence about the effectiveness of Islamic bank lending, incorporating different policies and economic characteristics. Potentially, this will enrich our scientific knowledge about Islamic monetary and developmental economics.

The study made use of Impulse Response Functions (IRF) and Variance Decomposition Analysis (VDA), based on Vector Autoregressive (VAR) methodology. The model consisted of four variables (Islamic banks' deposits, Islamic banks' financing, overnight interest rates, and economic output). Monthly data covered the ten-year period from January 2007 to December 2016.

The rest of this paper is organized as follows. Section 2 discusses monetary policy theories, from the perspective of both Islamic and conventional banks and subsequently reviews relevant literature related to the role of Islamic banks in monetary policy. Section 3 discusses the data and methodology, Section 4 presents

empirical results and discusses the findings of the study, and Section 5 presents the study's implications and conclusions.

Theoretical Underpinnings and Literature Review

Monetary policy is one of the most important tools to manage money demand and supply, which eventually contribute to economic growth. It can influence the economy by various channels such as interest rates, exchange rates, bank credit, or asset prices. Under the interest rate channel, monetary policy is transmitted to aggregate demand through the interest rate. Meanwhile, the exchange rates influence economic output through net exports. Under the bank credit channel, by controlling the liquidity in the banking system, monetary policy can determine the amount of lending distributed by the banking sector, which in the end affect the economy. Finally, the asset price channel generally explains that monetary policy can affect asset prices such as company stock or property so finally, it can impact the total output (Mishkin, 2010). It is notable, however, that the bank credit channel is often seen as the most significant intermediary in monetary policy transmission due to its central role in financing development in developing countries (Mishkin, 2010).

Monetary policies are not prohibited in Muslim countries. In fact, they are simplified, because charging interest (*riba*) and speculation (*gharar*) are not allowed (Ascarya, 2014). Furthermore, compared to conventional monetary systems, an interest-

¹ According to the 2018 Global Islamic Finance Report Malaysia and Indonesia are ranked first and sixth, respectively, in terms of worldwide Islamic financial assets (Cambridge IFA, 2018).

free monetary system is considered to be more stable in transmitting monetary policy to the economy due to its association with real assets (Yusof et al., 2009). Moreover, according to Chapra (1985), the goal of monetary policy in Islamic economics is economic welfare, full employment, socio-economic justice, and equitable distribution of income. To achieve these, Islamic monetary policies preserve economic resources, including money, in all forms of policy and provisions permitted by sharia (Ascarya, 2006). In this case, the role of the Islamic financial sector is required as a financial intermediary.

In most Muslim countries today, Islamic banks have grown side-by-side with conventional banks. The presence of these two different financial systems, though, requires monetary authorities to adopt parallel monetary policies. In an Islamic financial system, monetary policy relies on interest rates as a benchmark as well as profit sharing, transaction margins, and wages (Ascarya, 2012). Monetary authorities need to deal with both financial systems to achieve their monetary policy goals. Therefore, it is important to understand the effectiveness of the Islamic banking channel in transmitting monetary policies.

Several previous studies have tried to investigate the role of Islamic banks in monetary policy. Kassim et al. (2009), one of the earliest studies on this research topic, analyzed monetary policy in both the conventional and Islamic Malaysian banking sectors. The study examined the sensitivity of banks' balance sheets, measured by the

amount of financing and deposits to changes in interest rates. Using VAR methodology, covering the period from January 1999 to December 2006, the study found that Islamic banks' balance sheets were more responsive to interest rates than those of conventional banks. Conventional banks, particularly on the credit side, were also generally insensitive to monetary policy. This study also emphasized the importance of considering the impact of monetary policy on Islamic banking institutions.

Sukmana and Kassim (2010) examined the monetary policy role of Islamic banks in the Malaysian economy from January 1994 to May 2007. The study analyzed the relevance of Islamic banking deposit and financing in channelling the interest rate (as monetary policy indicator) to industrial production index (as a macroeconomic indicator) by using the co-integration test, impulse response function, and variance decomposition analysis. It was found that Islamic banks' financing and deposits played an important role in Malaysia's monetary transmission process. This implies that policymakers should take Islamic banks into account when designing monetary policy in Malaysia.

In Turkey, Hakan and Gulumser (2011) examined responses of conventional and Islamic banks to interest rate changes. The variables in the study were the banks' balance sheets (deposits and loans) from 2005 to 2009. Theoretically, Islamic banks should be unaffected by interest rates. However, the study found that both conventional and Islamic banks were equally influenced by

interest rate movements. This changes the assumption that Islamic banks, due to their interest-free nature, are more stable than conventional banks.

Ascarya (2012) compared the impact of Islamic and conventional monetary instruments in Indonesia on economic output and inflation between January 2003 and December 2009. The proxies for Islamic monetary instruments were interbank shariah money market rates, profit and loss sharing rates, Islamic bank financing, and Bank Indonesia sharia certificates. Meanwhile, conventional monetary instruments used were interbank money market rates, loan interest rates, conventional bank loan rate, and Bank Indonesia certificates. By using Granger Causality and VAR methods, it was found that conventional monetary instruments affected inflation and economic growth negatively (except for Bank Indonesia Sharia Certificates). On the other hand, Islamic monetary instruments positively affected economic growth and inflation.

More recently, Naveed (2015) examined monetary policy transmission in Pakistan's dual banking sector. The study used interest rates as the monetary policy variable, banks' financing and deposits of both banking sectors, and other variables, such as the consumer price index and the real exchange rate, as control variables. Using a vector auto-regression model and data from January 2009 to December 2013, it concluded that because of Islamic banks' interest-free system, conventional banks were more sensitive than Islamic banks to

interest rate fluctuations. Moreover, Islamic banking in Pakistan increased the available types of interest-free financing during the period.

Overall, the studies suggest that Islamic banks have an important role in monetary policy and economy. However, the studies also found an interesting yet conflicting result. While Malaysian Islamic banks' balance sheets are more sensitive to interest rates shocks than those of conventional banks (Kassim et al., 2009), the opposite is true in Pakistan (Naveed, 2015). This raises questions about the real impact of monetary policy on Islamic banks and the effectiveness of Islamic monetary transmission in different countries. The latter issue is of concern because very few studies attempt cross-country analyses, which could provide important insights about how governments set monetary policy in dual banking systems. Cross-country analyses also would enable to find new evidence about the effectiveness of Islamic banking in countries with different economic characteristics, which also could determine unique, national monetary transmission channels. Rarely touched upon by previous studies, this is the focus of the current study.

MATERIALS AND METHODS

Because of their importance in contemporary Islamic banking, this study chose Indonesia and Malaysia for analysis. As hubs of rapidly growing Islamic finance in Southeast Asia, these two countries have well-established dual banking systems, in which Islamic banks operate in parallel with conventional

banks. Both also have a more advanced Islamic banking sector than many other countries. According to the Global Islamic Economy Report 2016 (Reuters & Standard, 2016), Malaysia and Indonesia are ranked first and ninth, respectively, in Islamic finance assets worldwide. Recent statistics also show that Islamic banks' financing has grown faster than that of conventional banks in Indonesia and Malaysia (see Figure 1 and Figure 2). This indicates that although Islamic banks' total business is smaller than that of conventional banks, it is growing more rapidly.

Indonesia started using a dual banking system in 1992 when the first Islamic bank was established. Its development was gradual, primarily because the government

adopted a sustainable strategy (for instance based on its peoples' requirements) known as the bottom-up approach (Ascarya, 2006). In contrast, Malaysia follows a top-down approach, where the government established Islamic banking in 1983 and actively intervenes in the market through banking and monetary policies (Ascarya, 2006). It also uses a comprehensive and pragmatic approach (for instance based on market demand) in developing its Islamic banking (Sukmana & Kassim, 2010). Moreover, in terms of monetary policy, both countries adopt conventional monetary policies while also using Islamic monetary instruments, such as Islamic interbank rates, profit-sharing ratios, and central bank sharia certificates. It is also notable that the

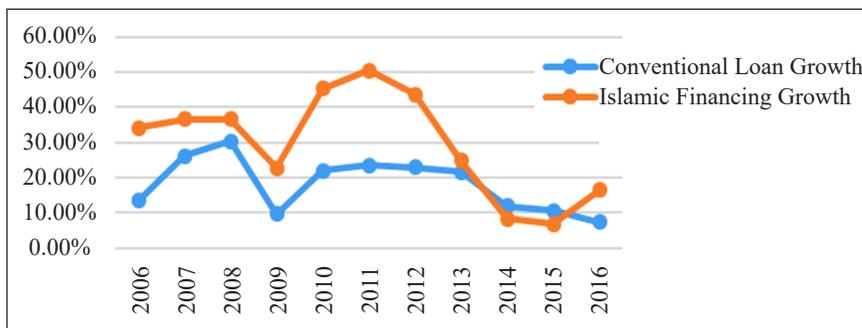


Figure 1. Credit growth of banking sector in Indonesia

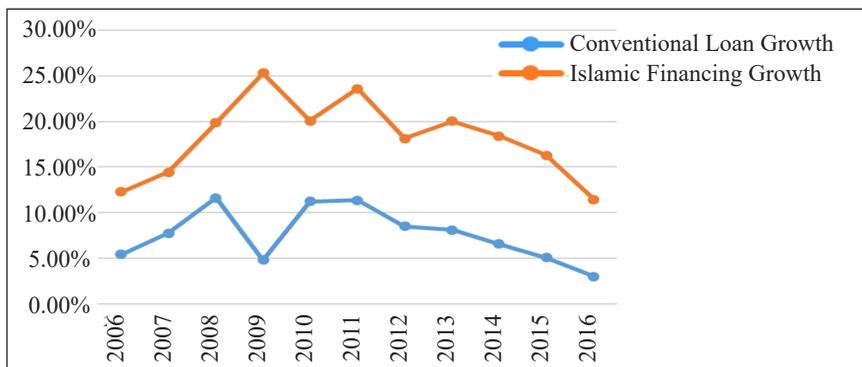


Figure 2. Credit growth of banking sector in Malaysia

variety of Islamic banking products and the market share of Islamic banks are higher in Malaysia. However, the proportion of profit-and-loss sharing financial products is higher in Indonesia.

This current study uses a Vector Autoregressive (VAR) model to investigate and compare the impact of Islamic banks on monetary policy and the economy in Indonesia and Malaysia. According to Brooks (2008), Vector Autoregressive models were popularized in the field of econometrics by Sims (1980). This model allows more than one dependent variable in the system and anticipates a simultaneous relationship between variables. In the monetary policy literature, a VAR model is the most widely used model. This method was incorporated in studies by Kassim et al. (2009), Sukmana and Kassim (2010), Hakan and Gulumser (2011), Ascarya (2012), Amar et al. (2015), and Naveed (2015).

A series of estimation techniques were carried out within the framework of a VAR model to answer research questions regarding unit root tests, optimal lag selection, stability tests, and final estimation results, using Impulse Responses Function (IRF) and Variance Decompositions (VD). The primary analysis relied on IRF and VD.

IRF is needed to understand the response of one variable to shocks from other variables in the system. Meanwhile, VD measures the proportion of movements in one variable caused by a shock to each variable in the model (Brooks, 2008). The general model utilized in this study is as follows:

$$VAR = f(IPI, IF, ID, ONR)$$

The model consists of four variables: Islamic banks' deposits, Islamic banks' financing, overnight interest rate, and economic output. The deposits and financing variables reflect the balance sheet of Islamic banks that channel monetary policy. The data is obtained from monthly statistical bulletins published by each country's central bank. Moreover, the interbank overnight interest rate (ONR) is used as a proxy for monetary policy and the industrial production index (IPI) is used as a proxy for economic output as one of the main targets of monetary policy. Data for these variables are obtained from the International Financial Report (IFS) and the Euromonitor database. All data used in this research are monthly, covering January 2007 to December 2016. The specific model specifications are formulated as follow:

$$IPI_t = \alpha_{1j} + \sum_{j=1}^k \beta_{1j} IPI_{t-j} + \sum_{j=1}^k \beta_{1j} IF_{t-j} + \sum_{j=1}^k \beta_{1j} ID_{t-j} + \sum_{j=1}^k \beta_{1j} ONR_{t-j} + \varepsilon_{1t}$$

$$IF_t = \alpha_{2j} + \sum_{j=1}^k \beta_{2j} IPI_{t-j} + \sum_{j=1}^k \beta_{2j} IF_{t-j} + \sum_{j=1}^k \beta_{2j} ID_{t-j} + \sum_{j=1}^k \beta_{2j} ONR_{t-j} + \varepsilon_{2t}$$

$$ID_t = \alpha_{3j} + \sum_{j=1}^k \beta_{3j} IPI_{t-j} + \sum_{j=1}^k \beta_{3j} IF_{t-j} + \sum_{j=1}^k \beta_{3j} ID_{t-j} + \sum_{j=1}^k \beta_{3j} ONR_{t-j} + \varepsilon_{3t}$$

$$ONR_t = \alpha_{4j} + \sum_{j=1}^k \beta_{4j} IPI_{t-j} + \sum_{j=1}^k \beta_{4j} IF_{t-j} + \sum_{j=1}^k \beta_{4j} ID_{t-j} + \sum_{j=1}^k \beta_{4j} ONR_{t-j} + \varepsilon_{4t}$$

Based on the literature discussed earlier, this study hypothesizes that Islamic banks in both countries have a positive role in channelling monetary policy into the economy. Monetary transmissions through bank lending channels work when monetary policies (ONR) are transmitted to banks' balance sheets (ID and IF) and then to the economy (IPI). This implies that Islamic deposits respond negatively to interest rate shocks, while Islamic financings respond positively to changes in Islamic deposits. Finally, industrial production index, a macroeconomic indicator, is expected to respond positively to Islamic financings.

RESULTS AND DISCUSSIONS

This section analyzes the role of Islamic banks in monetary policy based on short-run analysis using the Impulse Response Function (IRF) and Variance Decomposition

(VD). Monetary policy transmission through Islamic banks' lending channels begins with monetary policy shocks to banks' balance sheets, which then pass on to the economy. Twenty-four IRF and VD observations were made using the Cholesky Decomposition method. The results and discussion are explained below.

Islamic Bank Lending Channels in Indonesia and Malaysia

Indonesia. Figure 3 shows the response of Islamic banks' deposits in Indonesia to shock in the overnight interest rate as the indicator of monetary policy. It is shown that the shock in interest rate gives a negative impact on the number of Islamic banks' deposits in the third month by 0.002 percent. This implies that the number of Islamic banks' deposits will decline when there is a contractive monetary policy (as indicated by rising interest rates).

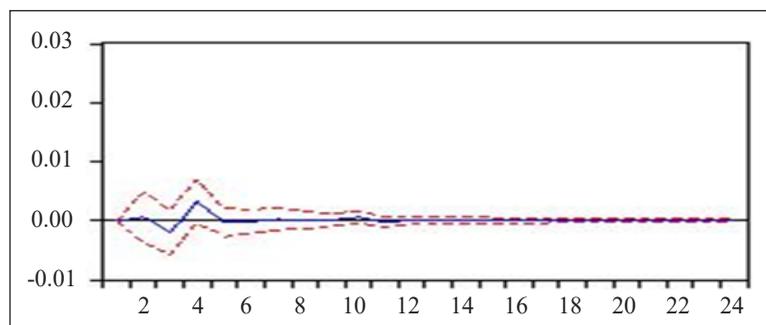


Figure 3. Impulse responses function of DLOGID to DONR in Indonesia

Nevertheless, the impact of interest rates on Islamic banks' deposits in Indonesia was less significant. This is supported by the VD results, which shows that the interest rate only contributes 2.29 percent to Islamic deposit variations (see Table 1). This means that interest rates have very little effect on Islamic banks' deposits.

Next, the effect of changes in Islamic bank deposits is examined. From Figure 4, it can be seen that the Islamic banks' financing initially move negatively until period 2 and subsequently move positively by 0.0055 percent when there is a shock on the Islamic deposits.

The positive relationship is strengthened by the VD result which shows that the variation of Islamic banks' financing

is explained by its deposits as much as 14.58 percent (see Table 2). The negative relationship in the first two months indicates that contractive monetary policy initially resulted in higher Islamic deposits, which presumably related to the asymmetric information problems amongst banking consumers (as they usually did not well informed about such changes and therefore could not make fast adjustment), yet the impacts immediately disappear and positive relationship is found. The positive relationship implies that when deposits collected by Islamic banks declined due to contractive monetary policy, their total financing also decreased. The opposite is also true that a more expansive monetary policy led to greater financings.

Table 1
Variance decomposition of DLOGID in Indonesia

Period	Variance Decomposition of DLOGID				
	S.E.	DLOGIPI	DLOGID	DLOGIF	DONR
20	0.026212	2.028183	89.59480	6.085960	2.291061
21	0.026212	2.029438	89.59025	6.089297	2.291015
22	0.026213	2.030252	89.58734	6.091414	2.290992
23	0.026213	2.030803	89.58540	6.092837	2.290964
24	0.026213	2.031270	89.58381	6.093962	2.290961

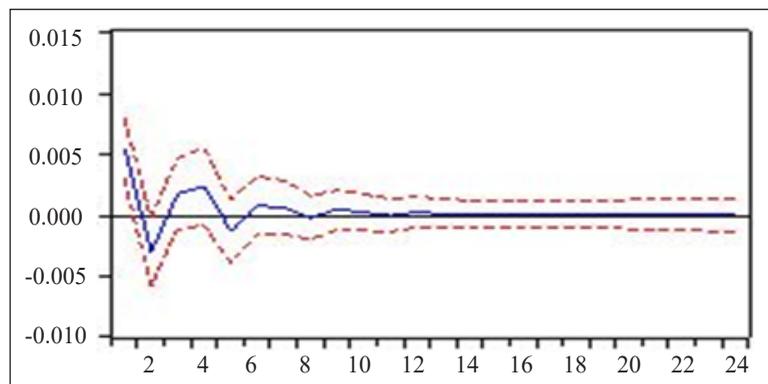


Figure 4. Impulse responses function of DLOGIF to DLOGID in Indonesia

The final step in examining the role of Islamic banks in monetary policy transmission is to test the impact of Islamic banks' financing to the economy. As shown in Figure 5, shocks to Islamic banks' financings positively affect economic output by 0.003 percent in the third month. This suggests that more Islamic financing will boost economic growth. However, given the small response, the impact is less significant.

This finding is supported by the result of the variance decomposition of the IPI variable in Indonesia (see Table 3). The result shows that Islamic bank financing is only able to explain an economic output variation of 3.31 percent until the 24th period, which indicates that Islamic banks' financings do not significantly affect economic output in Indonesia.

Table 2
Variance decomposition of DLOGIF in Indonesia

Period	Variance Decomposition of DLOGIF				
	S.E.	DLOGIPI	DLOGID	DLOGIF	DONR
20	0.018626	13.73289	14.58319	67.59296	4.090955
21	0.018628	13.73525	14.58094	67.59326	4.090546
22	0.018629	13.73673	14.57942	67.59360	4.090243
23	0.018629	13.73776	14.57838	67.59385	4.090011
24	0.018630	13.73858	14.57758	67.59396	4.089872

Table 3
Variance decomposition of DLOGIPI in Indonesia

Period	Variance Decomposition of DLOGIPI				
	S.E.	DLOGIPI	DLOGID	DLOGIF	DONR
20	0.031732	90.51499	1.604401	3.305314	4.575296
21	0.031732	90.51483	1.604414	3.305446	4.575307
22	0.031732	90.51474	1.604412	3.305542	4.575301
23	0.031732	90.51469	1.604411	3.305598	4.575298
24	0.031732	90.51464	1.604411	3.305654	4.575296

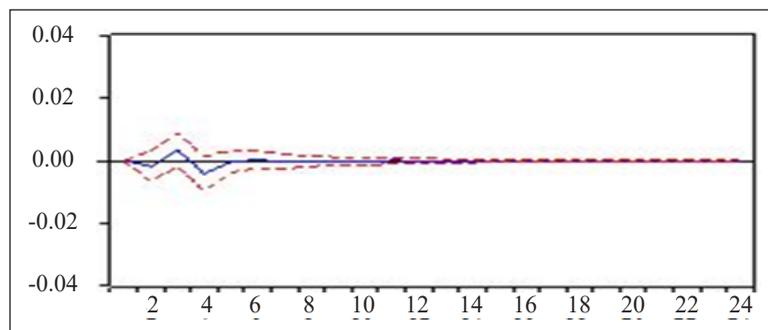


Figure 5. Impulse responses function of DLOGIPI to DLOGIF in Indonesia

Malaysia. For the Malaysian case, similar analytical steps were conducted. First, the impact of monetary policy shocks on Islamic banks' deposits was examined. Figure 6 shows that Islamic banks' deposits respond negatively to a change in interest rate by 0.001 percent. This indicates that when interest rates rise due to contractive monetary policy, the amount of Islamic deposits decreases.

However, the response of Islamic deposits to interest rate shocks is less significant. This is in line with the variance decomposition result (see Table 4). The variation of Islamic deposits can only be explained by interest rate by around 0.86 percent, meaning that interest rates play a very small role in Islamic banks' deposits. In other words, interest rates are not a suitable policy instrument for Islamic banks.

The next step was examining the impact of changes in Islamic banks' deposits attributable to their financings. Islamic financings show a positive response of 0.002 percent in the first month after a shock to deposits (see Figure 7). It can be inferred that when Islamic banks' deposits decrease due to monetary policy, financing amounts also decrease. The opposite also is true.

These findings regarding Islamic financing variables are also supported by VD results. Variations in Islamic financing can be explained by Islamic deposits by around 7.05 percent (see Table 5). This means that Islamic deposits indeed influenced Islamic banks' total financing in Malaysia.

The ultimate goal of monetary policy is to influence the aggregate economy. Thus, the last stage in testing bank lending channels through monetary transmission is

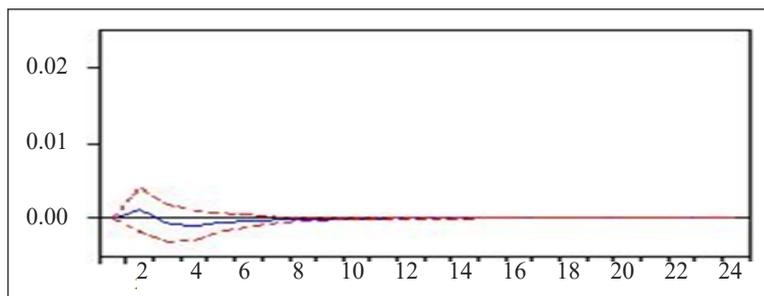


Figure 6. Impulse responses function of DLOGID to DONR in Malaysia

Table 4
Variance decomposition of DLOGID in Malaysia

Period	S.E.	Variance decomposition of DLOGID			
		DLOGIPI	DLOGID	DLOGIF	DONR
20	0.018970	3.735267	95.13900	0.263032	0.862699
21	0.018970	3.735267	95.13900	0.263032	0.862699
22	0.018970	3.735267	95.13900	0.263032	0.862699
23	0.018970	3.735267	95.13900	0.263032	0.862699
24	0.018970	3.735267	95.13900	0.263032	0.862699

to assess its impact on economic output. As can be seen from Figure 8, the Malaysian economic output responds to Islamic banks' financing shocks insignificantly and inconclusively. This is consistent with the

VD result (see Table 6) which shows that Islamic banks' financing only contributes 0.15% to the variation of economic output (IPI).

Table 5
Variance decomposition of DLOGIF in Malaysia

Period	S.E.	Variance decomposition of DLOGIF			
		DLOGIPI	DLOGID	DLOGIF	DONR
20	0.007761	11.01267	7.049322	78.35552	3.582486
21	0.007761	11.01267	7.049322	78.35552	3.582486
22	0.007761	11.01267	7.049322	78.35552	3.582486
23	0.007761	11.01267	7.049322	78.35552	3.582486
24	0.007761	11.01267	7.049322	78.35552	3.582486

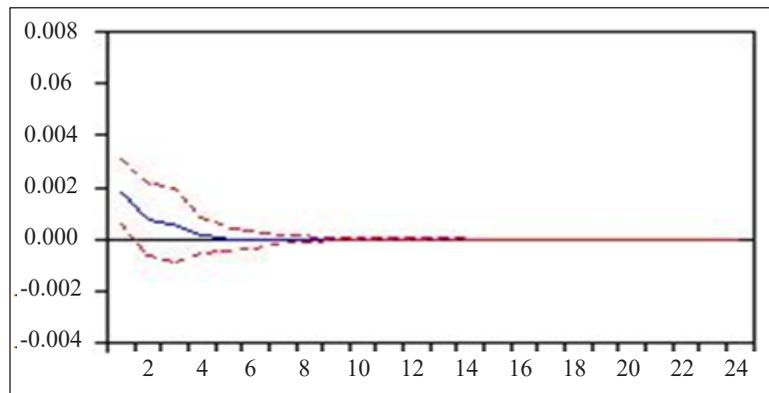


Figure 7. Impulse responses function of DLOGIF to DLOGID in Malaysia

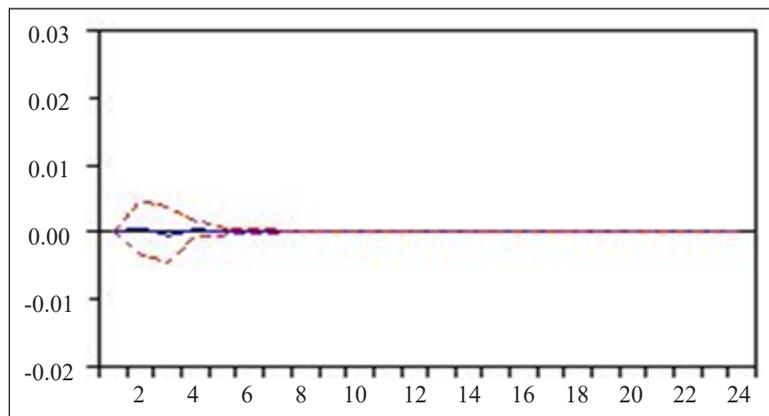


Figure 8. Impulse responses function of DLOGIPI to DLOGIF in Malaysia

Table 6
Variance decomposition of DLOGIPI in Malaysia

Period	Variance decomposition of DLOGIPI				
	S.E.	DLOGIPI	DLOGID	DLOGIF	DONR
20	0.022940	97.18028	1.161728	0.146038	1.511956
21	0.022940	97.18028	1.161728	0.146038	1.511956
22	0.022940	97.18028	1.161728	0.146038	1.511956
23	0.022940	97.18028	1.161728	0.146038	1.511956
24	0.022940	97.18028	1.161728	0.146038	1.511956

Comparative Analysis between Indonesia and Malaysia

Table 7 compares the overall findings in Indonesia and Malaysia. The results confirm some of the study's hypothesis. The first hypothesis regarding the response of Islamic deposits to monetary policy is confirmed, as Islamic banks' deposits in Indonesia and Malaysia give a negative response to a monetary policy change, albeit the magnitude is less significant. The second hypothesis is also confirmed, as Islamic financing responds positively and significantly to Islamic deposit shock. However, because of inconclusive results, the third hypothesis regarding the effect of Islamic financing on the economy is not confirmed.

A number of possible explanations and important insights can be derived from these results. First, the impact of interest rates on Islamic deposits is similar in

both countries. Islamic deposits respond negatively but not strongly to interest rate shocks. This confirms the study's hypothesis. A logical explanation for this is that Islamic bank customers transfer their funds to conventional banks to gain a higher return. This indicates that Islamic bank in both countries is exposed to displaced commercial risk, a finding shown in several earlier studies (Kassim et al., 2009; Kasri & Kassim, 2009; Sukmana & Kassim, 2010).

Second, in relation to the responses of Islamic banks' financing to shock on the Islamic bank deposits in both countries, the IRF results show that the financing policies of Islamic banks respond positively to deposit shocks since the first month both in Indonesia and Malaysia. Thus, lower total deposits, caused by monetary policy intervention, also decrease Islamic banks' financings. This result also confirms the study's hypothesis, because Islamic banks

Table 7
Summary of the results

Findings	Indonesia	Malaysia
The response of DLOGID to DONR	Negative and less significant	Negative and less significant
The response of DLOGIF to DLOGID	Positive and quite significant	Positive and quite significant
The response of DLOIPI to DLOGIF	Positive and less significant	Insignificant and inconclusive

remain heavily dependent on third-party funds as a main source of funding. Similar findings have been noted by Kasri and Kassim (2009), Sukmana and Kassim (2010), and Naveed (2015).

Furthermore, this study argues that this result relates to the low capacity of Islamic banks in both countries. Based on the VD results, Deposits make up only 7.04 percent of Malaysia Islamic banks' funding, compared with 14.58 percent in Indonesia (about double Malaysia's percentage). Nevertheless, from a policy perspective, this situation might be a good signal as it implies that Islamic banks cannot protect their asset portfolio from monetary policy intervention.

Finally, the study found that Islamic banks' financing did not contribute significantly to economic growth in either country. This conclusion is inferred from the previous results, which showed that shocks in Islamic financing did not significantly impact the Industrial Production Index. Indeed, for the case of Malaysia, Islamic banks' financing impacts economic output to a lesser degree. Overall, these results

suggest that Islamic banks' financing does not contribute significantly to economic growth in either country. This result has been documented by an earlier study such as Pratama (2015).

The above result is interesting because, theoretically, an interest-free monetary system should be more stable in transmitting monetary policy to the real economy due to its association with real assets (Yusof et al., 2009). This result, however, might be explained by Islamic banks' modest financing contribution, compared to total banking sector credit in both countries. Indeed, Islamic banks' financing in Indonesia and Malaysia is less than 30 percent of the total banking sector credit. Thus, its contribution to the real economy is small.

It is also notable that Islamic banks' financing has a larger impact on economic output in Indonesia than in Malaysia, despite the fact that the proportion of assets in the Malaysian Islamic banking sector is much greater than that in Indonesia (see Figure 9). Islamic financing in Malaysia heavily focuses on Murabahah and Bai

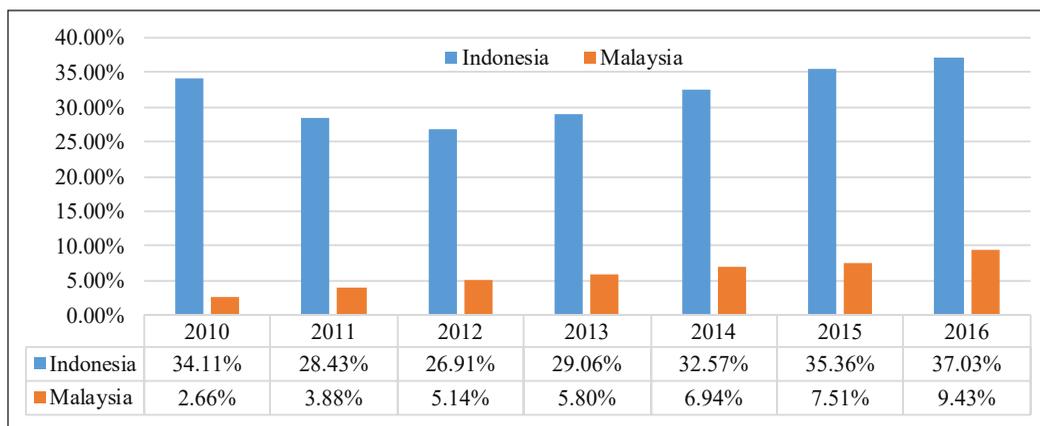


Figure 9. The proportion of profit-sharing financing in Indonesia and Malaysia

'Bithaman Ajil instruments, which could be categorized as debt-based financing. In contrast, Islamic banks in Indonesia uses more varied financing instruments, as well as a higher percentage of profit-sharing instruments. Indeed, at the end of 2016, the proportion of profit-sharing instruments in Malaysia and Indonesia were 37 percent and 9.4 percent respectively.

Taken together, it is not surprising that Islamic banks' financing in Indonesia has a greater impact on economic output than that in Malaysia. It is generally known that profit-sharing instruments are preferred in Islamic economics because of their connection to the real economy. Profit-sharing financing requires an underlying asset that will sustain activities in the financial and real economic sectors. Thus, a higher share of profit-sharing based instruments have a greater impact on economic output

CONCLUSION

This study investigates the role of Islamic banks in transmitting monetary policy to the real economy in Indonesia and Malaysia from 2007 to 2016. It concludes that Islamic banks in these countries play an important but moderate role in transmitting monetary policy to their respective economies. This conclusion plausibly explains the relatively low market share of Islamic banks in Indonesia and Malaysia. Additionally, Islamic financing in Malaysia is less prevalent compared to that in Indonesia, because of the small proportion of profit-sharing financing in Malaysia. This study's overall findings provide information for

policymakers about how to position Islamic banks in their planning of monetary policy. Monetary authorities find ways other than interest rate controls to influence Islamic banks. Finally, in addition to increasing Islamic banks' assets, governments also must pay attention to banking sector compliance. Using more creative bank funding, authorities can connect Islamic banks to the real economy. This will allow Islamic banks to play a more significant role in the transmission of monetary policy and to contribute to economic development.

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Theory of Reasoned Action and Citizen's Voting Behaviour

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ABSTRACT

The Election Commission of India proclaimed the results of India's 2019 electoral decision of public on May 23, 2019 for the lower house of the Indian parliament. Bhartiya Janata Party led by Prime Minister Narendra Modi, has won a whopping majority—303 seats, out of 543. Looking into 2014 general election the party won only 282 seats. This indicates that Indian citizens have given a clear mandate to rule once again to Modi by centralized consolidation by a national party, the first since 1984. Past studies have focused on electoral voting behaviour of citizens with a political quotient. However, limited studies are conducted among citizens, especially on Y generation. Following theory of reasoned action, a study was conducted, incorporating variables of attitude and ethnicity on intention to vote, with the moderating effect of social media and gender. The study followed quantitative research method with *cross sectional study design to collect data from five locations of Gujarat. A sample size of 1680 voters were considered by applying purposive sampling.* PLS-SEM analysis results revealed that attitude and ethnicity relate to voter's behaviour assimilating social media and gender. Implications of the study extends better insight to

the politicians, political parties and leaders in understanding the political behaviour of citizens during elections.

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Keywords: Citizen attitude, ethnicity, gender, political behaviour, social media, Theory of reasoned action (TRA), voting intention

INTRODUCTION

17th Lok Sabha (Lower House) of the Indian parliament, was held on May 23,

2019. The election result extended several questions to the researchers exit pole agencies as well as political leaders. The mandate of the people clearly indicates that they have given the second term to govern the country, for the existing the Bharatiya Janata Party (BJP), extending clear cut single party majority. This shows that, in comparison with the past elections, the ruling party got the majority, even with the high social media influence and policy controversies regarding demonetisation like challenging issues. People re-elected the ruling government without having much changes in voting behaviour, even with the high social media influence. The result provides a dynamic nature of human attitude and their intention to vote towards political parties as well as candidates in leading the government as well as the nation.

Voting is one of the most frequently used expressions in modern age of democratic politics. Voting behaviour is the way that different people tend to vote and it lies with subjective feeling. The subjective feeling of people varies in accordance with the rationality and expectations. People attitude towards political system, social structure and even political elections are influenced by numerous factors like economy, family, religious activities, peer groups, newspapers, television, religiosity, image of the candidate, social and political conditions. Studying the voting behaviour of Indians stresses the importance to understand multi-culture and multi-lingual community's expectations who are well exposed to media

and are dominated by ethnicity in the election outcome. A study was conducted in 5 locations of Gujarat, India, focusing into voters voting intention and behaviour. The result shows the evidence of attitude and ethnicity in its influence on voting intention among Y generation youth, directly and indirectly through social media and gender.

MATERIALS AND METHODS

Problem Statement

Indian political elections have not witnessed any changes among the citizens voting behaviour by looking into the 2019 by-election. The voters have not shown their switching over behaviour to opposition. This indicates that attitude and allied factors are very strongly aligned with the ruling party and there is less switching over behaviour among voters even with the influence of social media. In this context, a study was conducted to analyze the voter's intention and their switching over behaviour relating the factors like attitude, ethnicity, social media, and gender in its influence on voting behaviour in Gujarat state of India. Understanding the pulse of voters with the support of behavioural science theories provide a better knowledge on influential factors of citizens voting behaviour. The theoretical frame followed by the research is illustrated in Figure 1.

Research Questions

Based on the above deliberation study propose the following research questions:

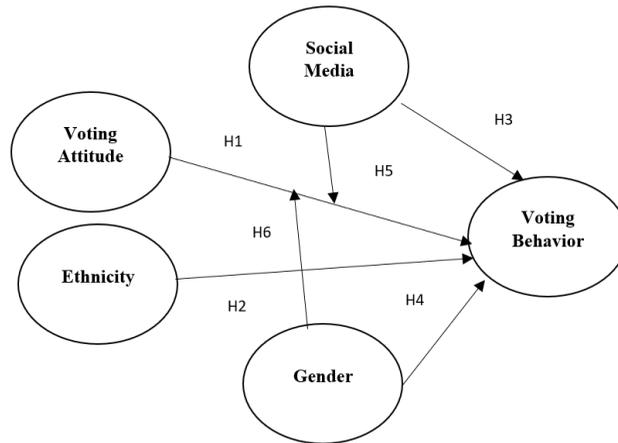


Figure 1. Theoretical Frame

1. Do voting attitude, ethnicity, social media and gender are related to voting intention of citizen's voting intention during political election?
2. Do social media and gender moderate the relationship between voting attitude and voting intention among citizen's during political election?
3. To analyse the relationship between voting attitude and voting intention among citizen's during political election.
4. To analyse the relationship between gender and voting intention among citizen's during political election.
5. To analyse the moderating effect of social media and gender in its relationship between voting attitude and voting intention among citizen's during political election?

Objectives of the Study

1. To analyse the relationship between voting attitude and voting intention among citizen's during political election.
2. To analyse the relationship between ethnicity and voting intention among citizen's during political election.
3. To analyse the relationship between social media and voting intention among citizen's during political election?

Theoretical Approach to Promote Voting Intention

According to the TRA's main expectations, an instant predictor of behaviours, is the intention to perform the respective behaviours. Intention and the behavioural intention are defined with two factors attitude toward performing the behaviour and subjective norm. How an individual's attitude stimulates favourably or unfavourably on an event or a situation that leads to that decides positive or negative feels toward the behaviour. It is argued in this research that people who find it challenging to vote for a diverse party in the upcoming election may more accustomed

with positive attitude to their current choice of political party in order to defend their existing voting behaviour. Intention to vote for a political party or a political candidate is thus influenced by favourable or unfavourable attitude.

Voting Intention

Based on the Theory of Reasoned action, individual's intention (voting intention) is to accomplish an assumed behaviour (Cast vote). Intentions (voting intention) are expected to apprehend the stimulating reasons that effect a behaviour; they are the clues of in what way people are eager to try, by what means an effort they are planning to exert, in order to perform the behaviour (Cast vote). In this context model established by Singh et al. (1995) was found to be influential in foreseeing voting intentions with the model's attitudinal components backing more to elucidate the deviation in voting intentions than subjective norms. Such deliberation further indicates that voting intention, which is decided by their attitude and subjective norms factors which lead to people voting behaviour.

Attitude and Voting Intention

Attitude is a social orientation - an underlying inclination to respond to something either favourably or unfavourably. Hence voting attitude in the context of behaviour (voting behaviour) is defined as the more favourable or unfavourable attitude with respect to individual's intention to perform the considered behaviour (Ajzen, 1991). Attitudes (Voting attitude) are a combination

of evaluations of a behaviour and beliefs about the outcomes of the behaviours. Evaluations can be positive or negative. Performing a behaviour (Casting vote) may depend on which beliefs are activated and whether those beliefs are positive or negative (Durnan & Trafimow, 2000). Based on this theoretical understanding of Theory of reasons action this particular research assumed in this research that the attitude of voters towards political parties, political candidates.

Hypothesis 1: Voting attitude has a direct and positive relationship with the voting intention among citizens.

Ethnicity and Voting Intention

In addition to the attitude, the second factor cited in the TRA is the subjective norm. In this research, the subjective norm variable is considered as the Indian culture. The current study interprets Indian culture into cultural politics with its close affinity with the politics, cultural, religious and linguistic grouping. The theory of ethnic voting behaviour used in this study is based on an extension of the theory of the ethnically homogeneous middleman group (EHMG) developed by Landa (1991) and Carr and Landa (1983). Voters belonging to a particular ethnic group are more likely to vote for candidates belonging to the same ethnic group, especially if the ethnic group is small relative to other ethnic groups, than other voters. Based on this theoretical understanding it is assumed in this research that culture has its influence on voting intention.

Hypothesis 2: Ethnicity has a direct and positive relationship with the voting intention among citizens.

Social Media and Voting Intention

According to Cazzava (2008), social media assume, firstly, the online publication of content and, secondly, the sharing of files, opinions, but also social interactions between individuals with common interests. Literature related to social media and voting behaviour indicates that persuasive behaviour of media influences strongly the attitude and perception of common people and their voting behaviour (Druckman & Lupia 2000). Regarding voting behaviour in the political arena, social media platforms facilitate widespread coverage of the news and its different form of interpretations and more voters to trust on the social media throughout the political process (Birkbak, 2012). The way a trustworthy reporting by media positively influences the voting behaviour, untrustworthy reporting will negatively affect people perception (Druckman, 2001). Such deliberation further indicates that social media has its influence on voting intention of people during election scenario.

Hypothesis 3: Social media has direct and positive relationship with the voting intention among citizens.

Gender and Voting Intention

The gender gap in voting behaviour is the difference between the percentage of men and women who voted for a candidate. The differences in voting behaviours of men

and women happen because of the different socialization processes of males and females (Burns et al., 2001). Mostly, people viewed male are more aggressive in a voice out the opinion and bold in deciding compared to the female. This is due to the stereotype of the gender-based in behaving and reacts (Esa & Hashim, 2017). While gender has proven to have little impact on voter-candidate affinities in some of the studies, at least not broadly and not using observational data (Goodyear-Grant & Julie, 2011). Citing a different trend, Burrell (2006) reported that women now made up a majority of voters, vote at higher rates than men, and could make the difference in who was elected. Such discussion more specifies that gender has its influence on voting intention of people during election scenario.

Hypothesis 4: Gender has a direct and positive relationship with the voting intention among citizens.

Social Media as Moderator

The political parties, as well as candidates, make use of social media during their campaigns to get mileage over the opponents. The political institutions are making use of all social media platforms, like Facebook and Twitter, to communicate with and engage voters. Voices of political leaders and parties are well projected through wide network and connect with other likeminded individuals. It is clearly identified in this research that social media users have been an increasingly important element in political communication, with due consideration to its impact on voting

intention. As it is discussed above voting intention to the political parties will be decided by voting attitude. Social media, as a powerful variable, may alter the voting intention of the voters, which is coming out of voting attitude. This indicates that social media can act as a moderator between voting attitude and voting intention.

Hypothesis 5: Social media act as a moderator between voting attitude and voting intention among citizen.

Gender as Moderator

Traditionally the past literature indicates that there is gender difference in voting intention and turnout among most established democracies. The voter turnout theory clearly indicates that male and female voters have significant difference in voting attitude and culminated into voting intention. The literature in the political science shows that gender disparities continue in some non-electoral forms of partisan involvements such as protest participation, partisan persuasion and campaigning (Beauregard, 2014; Córdova & Gabriela, 2017). However, some literature contradicts with the past observations that women vote at the same rate as men in most advanced democracies (Mayer, 2010; Verba et al., 1997). As a result, relatively little recent research tackles gender differences in voter turnout (Harell, 2009). Hence the role of gender as a moderator between voting attitude and voting intention needs to be studied.

Hypothesis 6: Gender act as a moderator between voting attitude and voting intention among citizen.

Methodology and Research Design

Cooper and Schindler (2014) expressed that research design held the components in a research project together. This research followed a descriptive cross-sectional study design as its plans of action which addressed the research questions posed. Following the positivist approach, the study thus considered quantitative research as its methodology.

Sampling

The study followed purposive sampling. The basic assumption of this technique was that the researcher would be able to select the cases that suited the needs of the study with good judgment and appropriate strategy (Tansey, 2007). Since the researcher placed great emphasis on the participants' commitment and suitability for the research topic, purposive sampling was used according to the characteristics utilized for selection in this study. A total number of 1680 of voter's purposely was selected. Further, the study given due attention to Krejcie and Morgan (1970) table, which represented a stable sample size of 384 for less than 1 million people. The sample size thus satisfied the stable sample size.

RESULTS

As guided by cited authorities, the study data met all the underlying assumptions of multivariate analysis, through SPSS such as data normality, homoscedasticity, unidimensional and multicollinearity. In addition, values of means, minimum, maximum and standard deviations were

calculated under descriptive statistical techniques. Furthermore, sample description was narrated through cross-tabulation. To draw inferences about study hypotheses, PLS-SEM technique was mainly employed for the data analysis.

Based on the questionnaire adopted the Table 1 shows that the Cronbach's Alpha for the voting attitude is 0.84 and Ethnicity is 0.80. Whereas the Cronbach's Alpha for social media is 0.93, Gender with 0.75, voting intention is 0.85. Overall scores show that the Cronbach's Alpha exceeding 0.7 (Nunnally, 1978). Hence, it can be assumed that internal consistency for this questionnaire is good.

The study used multiple regression analysis with the analytical support of SPSS.

Hypothesis 1: Voting attitude has a direct and positive relationship with the voting intention among citizens.

Based on Table 2, the R square value is 0.518 ($R^2= 0.518$) which means 51.8% of the voting intention can be explained by voting attitude. Furthermore, R is 0.720 indicates there is a significant positive relationship between the independent variable voting attitude and the dependent variable, voting intention among citizens. The results confirm the importance of voter's voting attitude and their intention to cast vote for political parties.

Table 1
Measurements

No	Variables	No. of Items	Cronbach's Alpha	Author
1	Voting attitude	16	0.840	Ajzen (2002); Hansen and Jensen (2008)
2	Ethnicity	12	0.800	Phinney (1992)
3	Social media	4	0.930	Esposito (2012)
4	Gender (Personal Attributes Questionnaire)	7	0.750	Spence et al. (1973)
5	Voting intention	6	0.850	Lampa et al. (2013)

Table 2
Model summary: Voting attitude and voting intention

Model	R	R Square	Adjusted R Square	SE
1	0.720 ^a	0.518	0.512	0.323

a. Predictors: (Constant), Voting Attitude

Table 3 shows about ANOVA whereby the result F Value is 31.621 with the significant is 0.000 level. Continued by the df (degree of freedom) whereby df represent the number of independent variables is 1 which is ethnicity. The result shows that there is a significant relationship between voting attitude and voting intention among citizens.

Table 4 indicated the coefficients level stated that the number in beta is 0.382 for voting attitude, which is a moderate, positive, significant correlation ($\beta=0.382$, $p < 0.05$) between voting attitude and voting intention. Thus, the result is positively significant between voting attitude and voting intention among citizens.

Hypothesis 2: Ethnicity has a direct and positive relationship with the voting intention among citizens

Based on Table 5, the R square value is 0.489 ($R^2= 0.489$) which means 48.9% of the voting intention reporting can be explained by ethnicity. Furthermore, R is 0.699 indicates there is a significant positive relationship between the independent variable, ethnicity and the dependent variable, voting intention among citizens.

Table 6 shows that the F Value is 51.001 with the significant as 0.000 levels. Continued by the df (degree of freedom) whereby df represent the number of independent variables is 1 which is ethnicity.

Table 3
ANOVA: Voting attitude and voting intention

Model	Sum of Squares	Df	Means Square	F	Sig.
Regression	8.975	2	8.112	31.621	0.000 ^b
Residual	80.231	687	0.134		
Total	81.113	685			

- a. Dependent variable: Voting Intention
- b. Predictors: (Constant), Voting Attitude

Table 4
Coefficients: Voting attitude and voting intention

Model	Unstandardized Coefficient		Standardize Coefficient	t	Sig.
	B	SE	Beta		
Constant	3.229	0.211		11.311	0.000
Voting Attitude	0.382	0.096	0.397	5.431	0.000

- a. Dependent Variable: Voting Intention

Table 5

Model summary: Ethnicity and voting intention

Model	R	R Square	Adjusted R Square	SE
1	0.699 ^a	0.489	0.484	0.283

a. Predictors: (Constant); Ethnicity

Table 6

ANOVA: Ethnicity and voting intention

Model	Sum of Squares	Df	Means Square	F	Sig.
Regression	11.562	2	11.445	51.001	0.000 ^b
Residual	51.556	687	0.212		
Total	62.114	685			

a. Dependent variable: Voting Intention

b. Predictors: (Constant), Ethnicity

The result indicated that there is significant relationship between ethnicity and voting intention among citizens with the prediction equation, (F=51.001, p < 0.05). Voting intention variation is well predicted with the effect of ethnicity of voters.

for ethnicity, which is a strong, positive, significant co-relations ($\beta=0.533$, p < 0.05) between ethnicity and voting intention among citizens. Thus, the result is positive significant between ethnicity and voting intention among citizens.

Table 7 indicated the coefficients levels with the number in beta is 0.533

Table 7

Coefficients: Ethnicity and voting intention

Model	Unstandardized Coefficient		Standardized Coefficient	t	Sig.
	B	SE	Beta		
Constant	1.970	0.231		6.190	0.000
Ethnicity	0.533	0.056	0.401	6.320	0.000

a. Dependent Variable: Voting Intention

Hypothesis 3: Social media has direct and positive relationship with voting intention among citizens

Based on Table 8, the R square value is 0.471 ($R^2= 0.471$) which means 47.1% of the voting intention reporting can be explained by social media. Furthermore, R is 0.686 indicates there is significant positive relationship between the independent variable, social media and the dependent variable, voting intention among citizens.

Table 9 shows that the F Value is 31.216 with the significance is 0.002 level. Continued by the df (degree of freedom) whereby df represent the number of independent variables as 1 which is social media. The results have indicated that there is significant relationship between social media and voting intention among citizens

with the prediction equation, ($F=31.216, p < 0.05$).

Table 10 indicates the coefficients level which have beta number 0.338 for social media, which there is a strong, positive, significant co-relations ($\beta= 0.302, p < 0.05$) between social media and voting intention.

Hypothesis 4: Gender has direct and positive relationship with the voting intention among citizens.

Based on Table 11, the R square value is 0.437 ($R^2= 0.437$) which means 43.7% of the voting intention reporting can be explained by gender. Furthermore, R is 0.661 indicates there is significant positive relationship between the independent variable, gender and the dependent variable, voting intention among citizens.

Table 8

Model summary: Social media and voting intention

Model	R	R Square	Adjusted R Square	SE
1	0.686 ^a	0.471	0.468	0.314

a. Predictors: (Constant): Social Media

Table 9

ANOVA: Social media and voting intention

Model	Sum of Squares	Df	Means Square	F	Sig.
Regression	0.887	2	0.831	31.216	0.002 ^b
Residual	44.421	687	0.121		
Total	48.332	685			

a. Dependent variable: Voting Intention

b. Predictors: (Constant) Social Media

Table 10
Coefficients: Social media and voting intention

Model	Unstandardized Coefficients		Standardize Coefficients	t	Sig.
	B	SE	Beta		
Constant	1.430	0.200		7.390	0.000
Social Media	0.302	0.059	0.376	6.490	0.001

a. Dependent Variable: Voting Intention

Table 11
Model summary: Gender and voting intention

Model	R	R Square	Adjusted R Square	SE
1	0.661 ^a	0.437	0.340	0.322

a. Predictors: (Constant), Gender

Table 12 shows that the F Value is 31.001 with the significance is 0.002 level. Continued by the df (degree of freedom) whereby df represent the number of independent variables is 2 which is gender. The results indicated that there was significant relationship between gender and voting intention among citizens with the prediction equation, (F=31.001, p < 0.05). Voting intention variation is well predicted with the effect of gender.

Table 13 indicates the coefficients level stated that the number in beta is 0.421 for gender, which is a strong, positive, significant correlation ($\beta = 0.421$, $p < 0.05$) between gender and voting intention among citizens. Thus, the result is positively significant between gender and voting intention among citizens.

Table 12
ANOVA: Gender and voting intention

Model	Sum of Squares	Df	Means Square	F	Sig.
Regression	6.678	2	7.912	31.001	0.000 ^b
Residual	71.331	687	0.232		
Total	72.324	685			

a. Dependent variable: Voting Intention
b. Predictors: (Constant), Gender

Table 13
Coefficients: Gender and voting intention

Model	Unstandardized Coefficient		Standardize Coefficient	t	Sig.
	B	SE	Beta		
Constant	4.551	0.320		13.200	0.000
Gender	0.421	0.121	0.432	7.221	0.001

a. Dependent Variable: Voting Intention

Hypothesis 5: Social media moderates the relationship between voting attitude and voting intention

Based on Table 14, the model 1, R square value is 0.519 ($R^2 = 0.519$) which means 51.9% of voting intention among citizens is predicted by social media. While the model 2, R Square is 0.348 ($R^2 = 0.348$) which means 34.8% of voting intention is predicted by attitude with social media as moderator. Furthermore, when seen the summary model table, in model 1 which R is 0.721 ($R = 0.721$) continued the model 2 which R is 0.590 ($R = 0.590$). The study result clearly shows that when social media comes in between voter’s attitude and their intention to vote, it partially moderate the

relation between voter’s attitude and voter’s intention to vote.

Table 15 shows the ANOVA result. The model 1 have F Value for social media is 15.389 and the significant is 0.000 level. Continued by the df (degree of freedom) whereby df represent the number of independent variables is 1 which is social media. While model 2 have the F value for the social media, and attitude towards the voting intention are 16.336 and the significance is 0.002 level. Followed by the number of independent variables is 2 which is social media and attitude. The result indicated that social media moderated the influence of attitude towards the voting intention with prediction equation, ($F = 15.389, p < 0.05$) & ($F = 16.336, p < 0.05$).

Table 14
Model summary: Social media moderates’ attitude and voting intention

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.721 ^a	0.519	0.511	0.362
2	0.590 ^a	0.348	0.344	0.353

- a. Predictors: (Constant), Social Media
- b. Predictor: (Constant), Social Media, Voting Attitude

Table 15

ANOVA: Social media moderates' attitude and voting intention

Model	Sum of Squares	df	Means Square	F	Sig.
Regression	4.485	2	6.485	15.389	0.000 ^b
Residual	71.278	684	0.244		
Total	72.764	686			
Regression	7.745	1	4.372	16.336	0.002 ^c
Residual	66.122	685	0.221		
Total	69.332	686			

a. Dependent variable: Voting Intention

b. Predictors: (Constant), Social media

c. Predictors: (Constant), Social media, Voting Attitude

Table 16 portrays the coefficients level. The result show that social media have significant influence on voting intention, where the significant level is 0.000 ($\beta=0.300$, $p < 0.05$). When it comes into the moderation effect, social media moderate the effect of voting attitude and voting

intention. The result shows a significant relation because social media ($\beta=0.323$, $p < 0.05$) and the voting attitude ($\beta=0.309$, $p < 0.05$) is found partially significant as well. In conclusion, the table 16 has proven the fifth hypothesis (H5), social media moderates the effect of voting attitude and voting intention.

Table 16

Coefficients: Social media moderates' attitude and voting intention

Model	Unstandardized Coefficients		Standardized Coefficient	t	Sig.
	B	SE	Beta		
Constant	3.800	0.0120			0.000
Social media	0.300	0.0230	0.213	0.290	0.000
Constant	2.860	0.222		12.223	0.000
Social media	0.323	0.071	0.321	3.342	0.002
Voting attitude	0.309	0.056	0.310	3.212	0.000

a. Dependent Variable: Voting Intention

Hypothesis 6: Gender moderates the relationship between voting attitude on and voting intention.

Based on Table 17, the model 1, R square value is 0.490 ($R^2= 0.490$) which means 49.0% of voting intention among citizens is predicted by gender. While the model 2, R Square is 0.271 ($R^2= 0.271$) which means 27.1% of voting intention is predicted by voting attitude with gender as moderator. Furthermore, when seen the summary model table, in model 1 which R is 0.700 ($R=0.700$) continued the model 2 which R is 0.521 ($R=0.521$). The study result clearly shows that when gender

comes in between voter’s attitude and their intention to vote, it partially moderates the relation between voter’s attitude and voter’s intention to vote.

Table 18 shows about the ANOVA result. The model 1 have F Value for gender is 18.129 and the significant is 0.000 level. Continued by the df (degree of freedom) whereby df represent the number of independent variables is 1 which is attitude. While model 2 has the F value for the social media, and attitude towards the voting intention are 17.348 and the significance is 0.000 level. Followed by, the number of independent variables is 2 which is gender and attitude. The result indicates

Table 17

Model summary: Gender moderates’ voting attitude and voting intention

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.700 ^a	0.490	0.485	0.306
2	0.521 ^a	0.271	0.270	0.301

a. Predictors: (Constant), Gender

b. Predictor: (Constant), Gender, Voting Attitude

Table 18

ANOVA: Gender moderates’ voting attitude and voting intention

Model	Sum of Squares	df	Means Square	F	Sig.
Regression	6.112	1	7.012	18.129	0.000 ^b
Residual	71.001	685	0.241		
Total	72.091	686			
Regression	7.745	2	5.778	17.348	0.000 ^c
Residual	62.122	684	0.290		
Total	61.332	686			

a. Dependent variable: Voting Intention

b. Predictors: (Constant), Gender

c. Predictors: (Constant), Gender, Voting Attitude

that social media moderated the influence of attitude towards the voting intention with prediction equation, ($F = 18.129, p < 0.05$) & ($F = 17.348, p < 0.05$).

Table 19 portrays the coefficients level. The result show that gender has significant influence on voting intention, where the significant level is 0.000 ($\beta = 0.341,$

$p < 0.01$). When it comes into the moderation effect gender moderate the effect of voting attitude and voting intention. The result shows a significant relation because gender ($\beta = 0.321, p < 0.01$) and the voting attitude ($\beta = 0.309, p < 0.05$) is found partially significant as well.

Table 19

Coefficients: Gender moderates' voting attitude and voting intention

Model	Unstandardized Coefficients		Standardized Coefficient	t	Sig.
	B	SE	Beta		
Constant	2.990	0.019			0.000
Gender	0.341	0.033	0.334	0.321	0.000
Constant	2.860	0.218		11.178	0.000
Gender	0.333	0.092	0.319	4.328	0.000
Voting Attitude	0.321	0.088	0.300	4.621	0.000

a. Dependent Variable: Voting Intention

DISCUSSION

Major analysis in this research is made to test the TRA in the political field. The study result indicates that there is direct and positive relationship with all the independent variables on dependent variable voting intention. Voters attitude has a positive and significant effect on the voting intention with a predictive probability of 51.8%, ethnicity with a predictive probability of 48.9%, and social media with a predictive probability of 47.1% and gender with a predictive probability of 43.7%. The study also made the predictability assessment on the moderation effect of social media and gender on voter's intention. The study result shows partial moderation effect of social

media 34.8%. and gender 27.1% on voter's intention.

Attitude and Voting Intention

Based on the empirical result the research model proposed was observed to be by and large effective in forecasting the intentions of voters. People attitude towards voting is thus decided by their favourable and unfavourable belief towards political candidates and political parties (Durnan & Trafimow, 2000). People change their attitude based on unfavourable attitude which has come out of their emotional evaluations on political parties as well as political candidates during electoral days (Abele & Wojciszke, 2007; Fiske et al., 2007). Results shows the voters intention

to vote to the same party in the 2019 by-election. The voters have not shown their switching over behavior to opposition. This indicates that attitude and allied factors are very strongly aligned with the ruling party and there is less switching over behavior among voters even with the influence of social media. Hence voting behaviour is the resultant manifestation of people voting attitude which results from perceived evaluation of politics parties' political candidates, manifesto, and the likes which influence belief system of citizens.

Ethnicity and Voting Intention

Theories of racial voting commence with the evidence that ethnic signs induce identity-based reflections (Barreto, 2010; Perez, 2015). The racial and ethnic identity brings a feeling of insider and outside based on the ethnic orientation or social grouping. The findings clearly indicate that voting intention among the citizens are predicted by the ethnic background of the candidates as well as political parties. Present study is in line with studies conducted by recent research scholars which spells out the effects of candidate's racial/ethnic identity on voters' choices (Fraga, 2016). Such discussion on ethnic based candidates indicates that ruling political party thus has shown strong affiliation with the ethnic identities to float the candidates and that influence the voter's intention vote for certain political parties as well as the candidates. Highlighting a shared racial/ethnic identity and shared practices can support candidate's plea to specific racial/

ethnic group of people. Theory of Reasoned action component subjective norm (ethnicity in this research) has significant role in voter's decision making.

Social Media and Voting Intention

Social media has its role in influencing the belief system of voters. Social media influence the voter's decision favourably or unfavourably based on the information they receive. Social media which facilitates a political communication that stimulates negative evaluations and disrespectful belief towards the political parties and political candidates through the campaigns influence voter's intention to vote or switch over their decision to vote. In the political context, research on negative campaigning shows that disrespectful communication can cause damage to attackers' reputations (Mutz & Reeves, 2005), decreasing their likeability (Carraro & Castelli, 2010), perceived fairness (Brooks & Geer, 2007), and their audience's positive affect (Fridkin & Kenney, 2004). The candidates floated by the ruling parties got the back up and support from the media, which influenced voter's their decision to vote for ruling political party. Switching over behaviour is not thus entertained by the voters in this regard. Such deliberation with empirical results proves that voting pattern in Gujarat will be influenced by social media which produces respectful and disrespectful political campaigns through social media platforms on the political parties as well as ethnic-based candidates.

Gender and Voting Intention

Present study evaluates the gender differences in voting intention. Results show that males are more prone to voting intention in comparison with the females. The gender differences literature in the past clearly indicates the difference between men and women on issues related to several aspects like social welfare policy, free enterprise, and questions relating to the use of force. (Everitt, 1998, 2002; Wearing & Wearing, 1991). Based on the social-role theory analysis (Eagly et al., 2004), it is thus assumed in this research that any significant difference between men and women in the voting patterns is inconsistent with the continued female dominance of the domestic sphere, which shapes women's socio-political attitudes intrinsic in their customary domestic duties for example, promoting the welfare of children and families. It is thus inferred from the discussion that voting pattern is be influenced by gender differences in their preferences towards voting intention.

Attitude, Social Media and Voting Intention

The study results indicate partial moderating effect. The attitude towards the political parties and political candidates has formed with people after long years of interaction. Nevertheless, social media shares believable and unbelievable information about the political parties and political candidates during electoral days to deviate the focus of citizens. People are so calculative during the campaign days and their judgment is based

on their belief system rather information shared in the media. On the contrary, due to the partial influence of social media on the attitude of voters, some volume of voter's intention to vote also may change leading to switch over behaviour. Sometime this will develop such a scenario of marginal victory over the other current ruling political parties and their candidates. It is rightly pointed out in the context that if people are consuming content on social media it will reflect in their perception about the Political Parties or candidates (Sharma & Parmar, 2016). An indication of this moderated observation indicates that social media can partially influence the voter's decision towards a ruling parties' candidates. Theory of Reasoned action component attitude in its influence on voting intention is thus moderated by social media, showing its partial moderation.

Attitude, Gender and Voting Intention

The present results indicate a partial moderating effect of gender on attitude and voting intention. This indicates that gender is moderately influencing the voting intention of people during electoral days. The study highlights gender differences in voting intention where females tend to be less coherent than men at the ballot. Women may express politics differently – they may express anger differently, and consequently express this anger often by voting differently. Those who have high traditional gender identities may poll the votes intensely in comparison with those who does not have. There will be such a probability that the

attitude with a strong gender identity will be carried away with the judgement and evaluations on political party stands and the candidates' political profile, compromising the gender neutrality. The partial effect of gender in between attitude and voting intention indicates that voting intention based on gender influence is fractional and other factors related to woman in general, personal or institutional may be influencing. Theory of Reasoned action component attitude in its influence on voting intention is thus moderated by gender, showing its partial moderation effect.

IMPLICATIONS

Practical Implication

Significance of TRA application political psychology field is well established in this research. The study observations indicate that voting attitude is decided by political parties and candidate's credibility in the political field. Political marketers should explore these factors when they will be engaged in political campaigns. The qualities of political parties and their candidates considered vital by voters will be identified together with the various sources of effects. It was stated by Singh et al. (1995) that packaging, positioning, and promotion of candidates and political parties were a few of the factors which facilitate belief and attitude formation among voters during electoral days. This tactic is worthwhile for political marketers since personality dynamics have been found to be more significant than issue-based factors in political communications. It is

also examined in this research the impact of ethnicity on voting behaviour. It is clear from the study that voters of different ethnic backgrounds observe the ethnic source cue of a candidate in political campaigns and how such perceptions influence voting intention. In order to win the elections political parties may investigate the ethnic candidates where ethnicity will be playing an important role. The study also provides better understanding on the impact of social media, and gender image on voting intention and behaviour. The political parties can make a practical decision on for future political campaigns with due considerations on gender preferences of people wherever it is providing better mileage for win. Social Media like platforms like Facebook, Twitter, LinkedIn, WhatsApp, Line, etc. may be used for better political sway.

Theoretical Implication

The overall purpose of this study will be to test the ability of TRA in predicting voting intention. TRA envisages that attitude towards behaviour is a determining factor of behavioural intention, viz. the voting intention among citizens. Attitude is the resultant manifestation of belief. It is the belief towards the political parties as well as the candidature image which determine the voting attitude which result into voting behaviour. Individuals who observe them as members of a *political party* may adopt the group's standards or values and practice these as a guide for their own *attitudes* and behaviours. Further the subjective norm variable ethnicity in this research also

influencing voter's intention to vote. As suggested by past researchers' ethnicity may be considered central to peoples' decision making. The study supports the theoretical component, the normative variable, ethnicity and accept the claim made by the past researchers that ethnic orientation as a source of choice criteria that drive voting behaviour. The study thus test theory of planned behaviour components viz., attitude towards voting and subjective norms towards voting behavioural intention.

CONCLUSION

The objective of this research was to test the TRA components in its influence on voting intention among voter's during electoral campaigns. Research posed two research questions in order to test the 6-hypothesis proposed. Results indicates that all the direct hypothesis supported and prove the relevance of the TRA. Further in order to test the indirect effect study posed two factors viz., social media and gender as moderators. These effects also indicate that social media also partially moderates its influence on voter's attitude toward voting intention. Political parties are constantly interested to gain information around the elements that effect the voter to align their interest towards political parties and select political candidate of his/her choice. This study thus paves better understanding on the voters voting intention. Political campaigns a should consider TRA factors as well as influence of social media and gender orientations on issues in order to align their political marketing and

communications to gain advantage of the rivals during electoral days.

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On Religious Experience: A Critique of John Dewey's Notion of Religious Experience from Muslim Illuminationist Perspective

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ABSTRACT

The notion of religious experience has been debated by scholars, especially with regard to whether the religious experience is a product of human volition and whether it is universally applied to all humans regardless of their religious affiliations. John Dewey offered an interesting thought stating that religious experience was a product of human deliberation and everybody could have it, even atheists. This notion of the universality of religious experience is relatively new and worth further discussion. Therefore, this article discusses and examines Dewey's notion of religious experience by using the theory of "knowledge by presence" discussed by Muslim philosophers, ranging from Shihabuddin Suhrawardi, Mulla Sadra, Seyyed Hossein Nasr, and Mehdi Ha'iri Yazdi. In this article, Muslim philosopher's epistemological explanation of knowledge is applied to understand what universality of religious experience means and how one's religious experience differs one another. This approach offers a new perspective arguing that religious experience is essentially an immediate experience of experiencing subject without any intermediation, including human volition, and it is existentially universal in the realm of feeling, not on the realm of imagination as Dewey maintained.

Keywords: Degrees of perfection, experience, feeling, imagination, knowledge by presence

INTRODUCTION

Religious experience is generally associated with the experience of pious and religious persons such ascetics, mystics, or religious scholars. Mystical experience is even considered the highest form of religious experience since human unification with God can occur presumably only in a mystical realm. John Dewey (1962) challenged such

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understanding by insisting that religious experience was more related to human experience with low flying and inclusive ideals rather than with specific supernatural beings. If one binds himself to any kind of ideals through imagination, such imaginative relation will produce effects in human life. Imagination not only helps human beings to make a connection with the ideals but also provides an experience that leads human beings to reorient and adjust their attitudes and conducts pertaining to their relationship with those ideal ends. The religious quality of experience is exactly residing in this imaginative or mental bound (between oneself with the ideals) since the original meaning of the term religion is “being bound or tied” (Dewey, 1962). A religious experience in Dewey’s mind is therefore understood in terms of these two moments: one, when a human makes a connection with the ideals through imagination; two when the imagination renders a better reorientation of human attitude and conduct. In other words, religious experience is formed by an active role of human volition through imagination and is not something given or received immediately and passively by human beings (Dewey, 1962) because human beings should, first of all, make a connection with the ideals in the aims of rendering a reorientation of their attitudes and conducts.

John Dewey argued further that this religious experience was not a monopoly of pious-religious persons. An atheist or non-pious person could also have such experience as long as he connects

himself through imagination to any kind of ideals. When someone devotes to a cause, reads or writes poetry that opens a new perspective, or dwells himself in a philosophical reflection, he certainly reaches such religious experience. In other words, religious quality of experience belongs to all sorts of experience, ranging from aesthetic, scientific, moral, political, companionship, neighborhood, friendship, to citizenship experience (Dewey, 1962). A religious experience, in other words, is considered universal; everybody is qualified to have it.

METHOD

The above accounts of religious experience are eloquently discussed in Dewey’s concise book, *A Common Faith* (1962). He departed from William James (2002) in terms of eliminating a supernatural element of religious experience. In this article, this notion of religious experience will be scrutinized through the lens of the theory of “knowledge by presence.” This is a theory that has been reintroduced and discussed by Muslim philosophers like Shihabuddin Suhrawardi, Mulla Sadra, Seyyed Hossein Nasr, and Mehdi Hairi Yazdi. In addition, enriched by Friedrich Schleiermacher’s notion of religion in *On Religion: Speeches to Its Cultured Despisers* (1893) and William James’ pragmatic approach of religious experience, the above two Dewey’s claims of religious experience is also critically examined, especially when religious experience is considered a result of human volition and is regarded universal only by

referring to a terminological root of the term “religion”. This article argues that religious experience is immediately “present” in the human mind and distinguishable by its degrees of perfection and by various human reactions derived from such experience.

RESULTS AND DISCUSSION

Muslim Illumination Theory

Islamic epistemology is generally understood as a theory of knowledge that recognizes revelation in addition to senses, reason, and intuition as sources of knowledge (Nasr, 2000, 2006). Therefore, revelation plays an important role as proof, evidence, and source of knowledge and moral guidance in Islamic sciences such as *fiqh* (Islamic law) and *kalām* (Islamic theology). However, in this article, revelation (The Qur’an) is not used as religious proofs to argue for or against John Dewey on religious experience since they have different audiences. The Qur’an is a proof for Muslims. For them, the revelatory proofs can be employed to justify the existence of knowledge derived not only from revelation but also from senses, reason, and intuition (heart). Ismail Raji al-Faruqi (2000) in the front page of his book *al-Tawhid* cited the Qur’an, al-Nahl (16): 78, that says, “And Allah has brought you forth from your mother’s womb knowing nothing—but He has endowed you with hearing, and sight, and minds (*af’idah*, M. M. Pickthall translated this term as hearts), so you might have cause to be grateful.”

The above verse is deemed one of the revelatory pieces of evidence for the possibility of having or deriving

knowledge by using reason and heart (*af’idah*). Muslim thinkers and philosophers have been engaging their non-Muslim fellow philosophers using rational and philosophical means and inquiries. Among them are Shihabuddin Suhrawardi, Mulla Sadra (whose original name is Şadr al-Dīn al-Shīrāzī), Seyyed Hossein Nasr, and Mehdi Hairi Yazdi.

Suhrawardi introduced a theory of illumination (*ishrāqī*) in understanding the relationship between God with creatures with the illustration of the relationship between “The Light of Lights” and “lights”. There are four classes of light: the self-subsistent light, accidental light, barriers (*barzakh*) or dusky substance, and dark (lack of light). These classes of light are distinguishable one to another by its degrees of intensity and luminosity or its perfection and deficiency. Suhrawardi writes, “Light in itself varies in reality only by perfection and deficiency and by entities external to it” (Suhrawardi, 1920/1999). The most perfect and luminous light is called “Light of Lights,” which is actually the source and cause of all other forms of light. The relationship between “Light of Lights” and other “lights” is analogous to the sun and its rays. The closer to the sun (Light of Lights), the light is more intense and perfect whereas if it is further from the sun, the light is less luminous and darker (Suhrawardi, 1920/1999).

Suhrawardi perceived human knowledge in a similar view. If the light is divided into the light “of itself and in itself” and light “of itself but in another” (Suhrawardi,

1920/1999), human knowledge is also divided into innate knowledge and acquired knowledge. Knowledge derived from reasoning, deduction or induction, and from sensory perceptions is called acquired knowledge, not innate knowledge. Another knowledge is already “presence” in a human through a process of illumination from the Source of Knowledge, which is analogous to the process of illumination in the order of lights. This is called “innate knowledge.” He writes, “Man’s knowledge is either innate or not innate. When an unknown thing cannot be made known by pointing it out or bringing it to mind and it is something that cannot be attained by the true visions of great sages, then knowledge of it must depend on things leading to it that are in an order and that are ultimately based on innate knowledge (*fiṭrīyāt*)” (Suhrawardi, 1920/1999).

Mulla Sadra in *Kitāb al-Mashā‘ir* adopted and modified Suhrawardi’s illumination theory and translated the notion of classes of light into the gradation of being (*tashkīk al-wujūd*).¹ He wrote, “the relation between it (Necessary Being) and that which is other than it is analogous to the relation between the rays of the sun—supposing that it subsisted by itself—with the bodies that are illuminated by it and are dark in themselves. When you witness the rising of the sun in a place and the illumination of that place by its light, then

¹ To understand how Suhrawardian scholars replied to Sadrian modification, understanding and critiques of Suhrawardi’s notion of light and essence, see its discussion in an article entitled “Suhrawardi’s Ontology : From “Essence-Existence” To “Light” (Widigdo, 2014).

another light resulting from this light, you will judge that this second light is also from the sun; likewise the third light and the fourth light, until one ends with the weakest light perceptible to senses. The same is true to *wujūd* of contingent beings in which there is differentiation in their proximity and distance from the One, the Real; for everything proceeds from God” (Sadra, 1964/2014). In this regard, for Sadra, the gradation of being is analogous to Suhrawardi’s classes of light. They are differentiated one to another from its proximity and closeness to the Necessary Being, the Real, or God.

In a similar vein, well-versed of Suhrawardi’s work on light and knowledge and Sadra’s notion of gradation of being, Seyyed Hossein Nasr argued that Islamic epistemology was essentially based on what was called “direct knowledge”, which was the same as Suhrawardi’s notion of innate knowledge. Nasr (2000) wrote, “Islam is thus essentially a way of knowledge. It is a way of gnosis (*ma‘rifah*). It is based on gnosis direct knowledge that, however, cannot by any means be equated with rationalism, which is an only indirect and secondary form of knowledge. Islam leads to that essential knowledge which integrates our being, which makes us know what we are and be what we know; in other words, integrates knowledge and being in the ultimate vision of Reality” (Nasr, 2000, p. 8). In Nasr’s view, direct knowledge (*gnosis*) is derived not from rational endeavors but through the illumination of the Source of Knowledge. Mehdi Hairi Yazdi continued

and refined the above Suhrawardi's ideas of light, Sadra's gradation of being, Suhrawardi's concept of innate knowledge, and Nasr's notion of direct knowledge in his book *The Principles of Epistemology in Islamic Philosophy* (1992) by introducing what was called "knowledge by presence." In the context of Yazdi's (1992) theory of "knowledge by presence (KBP)", the act of knowing involves three important elements: the knowing subject, the object known, and the act of knowing. The term "subject" signifies the mind that performs the act of knowledge and the term "object" refers to the thing or the proposition known by that subject. The relation between these two elements called the act of knowing (Yazdi, 1992). For the purpose of our analysis, however, the discussion on the object of knowledge is more relevant. The existence of the object of knowledge will determine whether certain knowledge belongs to "knowledge by correspondence" or "knowledge by presence". This understanding of knowledge is subsequently useful to understand "religious experience" from Islamic epistemology perspective, by means of which John Dewey's notion of religious experience will be critically engaged.

If the object of knowledge resides outside the human mind, the object is called an objective object, transitive object or external object. Knowledge derived from it is called knowledge by correspondence (KBC). This external object is initially independent and unknown to the subject of knowledge because it is beyond the reach

of the human mind. In order to make the act of knowing possible, according to Yazdi (1992), there must be a mental existence of the same object that resides within the human mind. This mental existence is called subjective object, immanent object or internal object. The act of knowing occurs when the mental existence of the object has a correspondence with the material existence of the object. The relation between these two kinds of an object is, therefore, a correspondence relationship, not existential relationship, as a catalog with the things that are being cataloged. The knowledge that derived from this kind of correspondence relationship is called knowledge by correspondence, in which the internal object plays "an intermediary representation role in the achievement of the act of knowing" (Yazdi, 1992).

Another kind of knowledge by correspondence is what Bertrand Russell (1967) called "knowledge by acquaintance" (KBA). Knowledge in this regard results from an acquaintance of the knowing subject with "the appearance" of the object known, not with the real object of knowledge itself. The acquaintance renders two moments: first, the moment of acquaintance itself, which is free from true-false dualism, second, the moment of inference or the description of the acquaintance, which is subject to a possibility of true and false (Russell, 1967). Russell (1967) provided the following example;

In the presence of my table, I am acquainted with the sense-data that make up the appearance

of my table—its color, shape, hardness, smoothness, etc., all these are things of which I am immediately conscious when I am seeing and touching my table... My knowledge of the table as a physical object, on the contrary, is not direct knowledge. Such as it is, it is obtained through acquaintance with the sense-data that make up the appearance of the table. We have seen that it is possible, without absurdity, to doubt whether there is a table at all, whereas it is not possible to doubt the sense-data. (Russell, 1967).

Unlike knowledge by correspondence (KBC) and knowledge by acquaintance (KBA), knowledge by presence (KBP) is not built upon an acquaintance with the external object or with the “appearance” of the external object, but upon acquaintance with internal sensations and feelings. This can only occur when the object of knowledge is present directly without intermediation in the mind of the knowing subject. An empirical example of this knowledge is our experience with pain or pleasure. Shihabuddin Suhrawardi provided an example of a man who was in pain from a cut of from damage to one of his organs (Suhrawardi, 1945).

A Brief Biography of Mehdi Hairi Yazdi and John Dewey

Mehdi Hairi Yazdi (1923-1999) is an Iranian prominent scholar that occupies an important place in Islamic scholarship

circle and philosophy. He was born in Qom in the year of 1923 in Qom, Iran, and died in the same city in the year of 1999. He was one of sons of Abd al-Karim Hairi Yazdi, a prominent Shi‘i cleric in Islam, who was the teacher of Ayatollah Komeini, the leader of Iranian Revolution. After spending an early scholarly career in his home country from studying Islamic sciences and philosophy in seminaries to completing a doctorate degree in 1953, he moved to the United States in 1953. In this period, the political atmosphere in Iran was unstable. The popular Prime Minister Mohammad Mosaddegh was overthrown by the monarchical leader, Mohammad Reza Pahlavi. Mehdi decided to migrate to the United States of America to learn and engage with Western philosophy. After working in some institutions, including teaching Eastern Existentialist Philosophy in Georgetown University, he moved to Canada completing another doctorate degree in the field of analytic philosophy in the University of Toronto in 1979. He wrote a dissertation and published it under the title *The Principles of Epistemology in Islamic Philosophy: Knowledge by Presence* (1992). This work is one of the central objects of this article’s discussion and one of his intellectual legacies in addition to *Kavushha-yi ‘adl-I Nazari* (1968) on “theoretical reason”, *Haram-I hasti: tahlili az mabadi-yi hasti shinasi-yi tatbiqi* (1980) on “comparative ontology between the Western and Islamic philosophical tradition”, *Kavushha-yi ‘aql-I ‘amali: falsafah-yi akhlaq* (1980) on “practical reason and ethics”, and *Hekmat and Hokumat* (1995) on “philosophy and government” (Jaffer, 2018).

John Dewey (1859-1952) is an American thinker and philosopher, whose ideas and works are influential in the field of philosophy, psychology, education, politics, and religious studies. He was born in October 1859, and died on June 1, 1952. At the age of mid-twenties, he taught philosophy at the University of Michigan. In 1880, he started to teach and undergo an intellectual career at the University of Chicago for ten years (1894-1904). At Chicago, assisted by some other philosophers, he founded American functional psychology. In 1904, Dewey went to Columbia and became a philosopher of democracy. In 1910, he was the fourth psychologist to be elected—as a scientist—to the National Academy of Sciences. In 1930, he was the first William James Lecturer in Philosophy and Psychology at Harvard University (Boring, 1953). Throughout his life, Dewey wrote several important books, including *A Common Faith*, *Art as Experience* (1934), *Liberalism and Social Action* (1935), *Logic: The Theory of Inquiry* (1938), and *Experience and Education*, *Freedom and Culture*, *Theory of Valuation* (1939). *The underlying philosophy of John Dewey emphasizes on the importance of human experience, organic and naturalistic account of metaphysics, and human betterment in general* (Hildebrand, 2018).

Dewey's Notion of Religious Experience and its Western Interlocutors

1. Religious Experience and Religious Acquaintance. In Dewey's account, religious quality of experience is determined

by one's relationship with the ideals; first, whether he is able to intentionally connect himself through imagination with those ideals, second, whether such imaginative connection renders a reorientation, adjustment, and betterment of life or not. Unlike Dewey who perceives religion and religiousness based on one's connection with ideals, Friedrich Schleiermacher views religion in a different way. He perceives it as intuition and feeling of the Whole. If the understanding of religion and religiousness in John Dewey's concept assumes the role of human volition and intentionality in order to establish a bond with the ideals, in Schleiermacher's understanding, human volition and intentionality have limited, even zero, role in generating the essence of religion or religiousness. For, Schleiermacher, religion is essentially contemplative and passive (Schleiermacher, 1893).

In the context of religious experience, if the moment of experience in Dewey's work is intermediated by the role of imagination—namely when the subject makes a connection with the ideals and when the ideals render an adjustment and reorientation on the subject—, Schleiermacher challenges this concept by stating that this moment of experience is lack of immediateness. The imagination for Schleiermacher is not intermediation between the subject and the object of experience, but the highest faculty of man where he/she can be “impressed with the feeling of omnipotence” (Schleiermacher, 1893).

The immediateness of religious experience in Schleiermacher's theory can be inferred from his understanding of the nature of religion, which is intuition and feeling. Intuition is understood as the objective pole of religiousness, in which the Whole acts upon an individual subject, just like a "heat" that acts upon our thumb. The feeling is perceived as the subjective pole of religiousness, in which the individual subject experiences action of the Whole, which can be illustrated by the "hot" felt in our thumb. The immediateness of religious experience for Schleiermacher occurs in both intuition and feeling because there is no intermediation between the Whole and the individual subject in both processes. However, based on Schleiermacher explanation, the real moment of religious experience occurs not in the process of "intuition," but in the moment of "feeling", where the duality of the Whole and the individual disappears. The only thing left is feeling, the trace of the Whole on an individual subject, just like the feeling of "hot" in the thumb that is rendered by the heat's action.

Schleiermacher writes,

The sum total of religion is to feel that, in its highest unity, all that moves us in feeling is one; to feel that aught single and particular is only possible by means of this unity: to feel, that is to say, that our being and living is being and living in and through God. (Schleiermacher, 1893).

Informed by the above Schleiermacher's account on the "passive" character of religion and the immediateness of feeling, John Dewey's understanding of religious experience could be regarded as an intellectualistic account of religious experience, instead of a non-intellectual account of it. It means that he still attempted to explain the religious experience that assumed the separation between the subject and the object of experience which then needed to be bridged through intermediation. John Dewey called the intermediation between the subject of experience and the object of experience (i.e. ideals) as imagination. It might be fair to regard such imaginative bound with the ideals as religious. However, for me, this kind of bound is not an experience (religious experience) but an acquaintance (religious acquaintance).

In Russell's notion of acquaintance that was discussed earlier, the subject is acquainted with the "appearances" of the sense-data of external objects like the color, shape, hardness, or smoothness of the table. In the case of John Dewey's notion of ideals and their relationship with the subject, the acquaintance occurs when the subject is acquainted with inclusive ideals through imagination. For example, a young painter is inspired to work on his masterpiece after attending a painting exhibition where he sees the works of great painters. He decides to start a new and different genre that he considers better than the existing schools of painting. The image of this new painting genre resides in his mind and compels him

to work hard to embody it in his canvas. In this regard, there are two moments of acquaintances: first, when the young artist is acquainted with appearances of physical objects, namely shapes, colors, or structures of the paintings in the exhibition; second, he is also acquainted with the ideal type of the physical object, namely the image of new painting genre. The subject here is not only acquainted with the appearance of the painting works but also with the ideals that are considered compelling.

Acquaintance is different from experience. Informed by the theory of “knowledge by presence” explained above, experience belongs to the order of beings, not to the order of conceptions. Experience is existential in which the subject and the object of experience is blended and united. Dilthey (1976) explained this existential understanding of experience in the following,

Consciousness of experience is one with its content just as subjectivity is one with its subject; the experience is not an object which confronts the person who has it, its existence for me cannot be distinguished from what is presented to me. (Dilthey, 1976).

If someone is experiencing pain from a cut in a finger, for instance, the feeling of pain is not the same with the shape or the size of the cut that he witnesses. The feeling of pain (as the object of experience) is within the subject’s consciousness, blended with the subject’s existence at the time when

he is experiencing the pain. Therefore, the acquaintance with the pain is different from the experience of it since the acquaintance is more related with the appearance or the sense-data of the cut in the finger, whereas the experience is related with the feeling of pain itself. In this sense, labeling John Dewey’s notion of religious experience with “religious acquaintance” is plausible since the ideal is actually acquainted, not experienced, by the subject. This label can be also applied to Schleiermacher’s notion of intuition. By means of intuition, the individual subject is actually acquainted with the Whole although it happens in a passive way. The real religious experience, therefore, takes place in the realm of feeling in which the subject and the object of experience is inseparably united.

2. The Universality of Religious Experience. If religious experience belongs to the realm of feeling, it must be universal. Everyone is qualified to have it regardless of his/her religion or religiosity since everyone can experience pain, pleasure, sadness, or happiness. However, the debate rises when a religious experience is placed in the relation between the subject and the ideals, and, when it is understood in terms of human attitudes and reactions towards the ideals.

John Dewey (1962) maintained that religious experience was universal and common to all human beings in two senses. One, religious experience was universal in the sense that an individual could make a form of relationship with any kind of ideals, not only limited to a religious

divinity or supernatural being. Anybody, regardless of his/her religious or non-religious backgrounds, could build such a religious relationship with any forms of ideal. Two, when someone was bound mentally to certain ideals—be it aesthetic, philosophical, scientific, moral, political, companionship or friendship ideal—, his/her general attitudes towards such ideals also qualified as religious. These general attitudes are considered universal as well in the sense that they render common effects on human beings, either in the forms of an adjustment, reorientation, adaptation, or accommodation. In the end, the difference between religious and natural/secular experience is irrelevant because all mental attitudes towards any ideals are perceived as a religious experience.

William James (2002) on the contrary provided a negative answer to the above question based on the fact that experience could be religious only if it was related to religious feelings resulted from the relationship with “the more” and it should also derive healthy-minded attitudes. Although at a glance he acknowledges that an individual can experience union with “the more” in an inclusive sense, in reality, he confines “the more” to divine beings. The divine in this context should be understood in terms of a primal reality, which is confined to the divinity understood by religious adherents. To this kind divinity, the individual should “feel impelled to respond to solemnly and gravely” (James, 2002). The solemn response, however, should be

transformative, not passive, in the sense that it can help the individual to cope with his/her wrongness, uneasiness, guilt, or deficiency. In other words, human connections and responses to the more should render a healthy-minded attitude and orientation. If they do not lead to the healthy-mindedness, they cannot be regarded as religious. Therefore, religious experience in William James’s theory is not universal in two aspects. First, religious experience is only derived from the individual relationship with the more or the divine in a supernaturalist understanding.² As a result, although he did not discuss comparatively the existence of natural experience in addition to religious experience, he recognized the distinction between the two kinds of experience, the religious and the natural one (James, 2002). Second, religious experience does not belong to all human beings. It belongs only to religious people who experience religious feelings and religious impulses that render a healthy-minded attitude and orientation.

Critical Analysis on Dewey: Illuminism Perspective

Influenced by neo-Platonic illumination theory that employs the parable of the Sun and its rays in order to explain the order

² He said, “If one should make a division of all thinkers into naturalists and supernaturalists, I should undoubtedly have to go, along with the most philosophers, into the supernaturalist branch.” This means that he associates himself with those who regards religious experience, which resulted from the relationship with the supernatural divinity, should be classified differently from the experience derived from natural/secular ideals (James, 2002).

of beings (Suhrawardi, 1920/1999),³ I will explain the notion of feeling as the nature of religious experience in an analogous order. The Whole (of Schleiermacher), the ideals (of Dewey), and the more (of James) are considered the Source of feelings, resembling the Sun as the source of light, heat, and hot altogether. The Sun emanates its rays in different levels of intensity into the universe; therefore, the higher rank of lights is to be distinguished from the lower ranks of lights based on their degrees of intensity. The closer we are towards the Sun, the more intense light we will find; and the further we are from the sun, the less intense light we will encounter. In the same fashion, the Source of feelings derives lower ranks of feeling through the process of emanation and analogously one is to be distinguished from another based on their degrees of perfection. The closer we are towards the Source of feelings, we will experience the more perfect feeling; and the further we are from the Source of the feelings we will experience the less perfect feeling.

In this regard, there are two movements of the feeling: the descending and the ascending movement. The descending reflects a process of emanation from the Source of feelings, which is the most perfect one, to the lower ranks of feeling that are

³ Shihāb al-Dīn al-Suhrāwardī, the founder of this theory, maintains that the Light of Lights engenders the lower light by means of illumination just like the Sun and its rays. The order of existence is similar to the order of light, in which the First Existence derives the lower existence by means of illumination. In addition, “the Light of Lights and the first light results from It are only to be distinguished by perfection and deficiency.”

less perfect. To a believer, for example, the religious feeling of the saints is probably seen to be more perfect and powerful rather than the laity’s feeling since the saints are considered closer to the Source of feelings (i.e. God). In addition, maestros like Leonardo Da Vinci have certainly a higher degree of feeling perfection compared to their followers or interpreters because the maestros are closer to the Source of feelings (the ideal, which is perhaps the ideal type of beauty in their work).

The ascending movement of feeling, however, denotes absorption of the feeling into a higher degree of perfection. If an individual wants to have a more perfect and powerful religious feeling, he/she can make him/herself closer to the Source of feelings and let her/himself absorbed into the realm of feeling. A mystic may perform certain spiritual exercises for this purpose. A writer may need a retreat to gain a mood, feeling, that brings her/him to the Source of feelings (e.g. the ideal type of writing).

Briefly speaking, the feeling can be perceived as diverse with regards to its degrees of perfection. However, regardless of its multiple degrees of perfection, all feelings are existentially still connected to the Source of feelings because the lower ranks of feeling are a manifestation of the Source and dependent on It. In other words, they are actually in “a strictly existential unity” (Yazdi, 1992).

In addition, these feelings are also diversified and particularized within individual subjects when they are accompanied and followed by human

reactions. There are at least three kinds of human reaction derived from these feelings: intellectual reaction, affective reaction, and emanative reaction. The intellectual reaction refers to (re)action that is influenced more by human volition rather than feeling. A calculation of reason based on human voluntary action carries more weight than an exercise of feeling. In turn, human agency is obtained not through a submission to the power of feeling but through human volition, free will, and intentionality. John Dewey's notion of human attitudes towards the ideals to some extents represents this kind of intellectual reactions.

John Dewey (1962) explained that the actual religious quality in the experience was measured by "the effect that is produced, the better adjustment in life and its conditions, not the manner and cause of its production." He went on to elaborate that the effects on an individual subject from his/her relationship with ideals in three different terms: accommodation, adaptation, and adjustment. "Accommodation" is the terms used to denote a passive and submissive attitude towards certain conditions. If there are conditions that cannot be changed, our attitudes will be modified in accordance with them. For example, changes in weather make us have to accommodate ourselves to it (Dewey, 1962). "Adaptation" is more active attitudes towards the conditions. When there are conditions that seem to challenge and hamper our wants and purposes, we will react against such conditions and modify them to meet our wants, demands, and purposes (Dewey, 1962).

Dewey (1962) called the general name of both accommodation and adaptation as "adjustment." In the process of adjustment, there are changes in our attitudes towards the world but they are not imposed by unchangeable objective conditions and also not driven by our subjective wants and demands. There is a higher cause that renders such changes, which is called an inclusive ideal. These changes of attitudes result from inclusive causes/ideals and take place in different persons in many ways. Dewey provides an example of the changes that are produced by devotion to a cause, by a passage of poetry that opens a new perspective, or by philosophical reflection. However, in addition to the changes in ourselves, the conditions surrounding us are also undergoing certain modifications. They are also arranged, settled, in relation to enduring changes in our being. It means that the adjustment of human attitudes that renders changes of the surrounding circumstances may have an element of submission (which may be seen from the changes in our attitude in accordance to the ideals); but, according to Dewey (1962), "it is voluntary, not externally imposed." For example, I voluntarily become an environmental activist that aims to prevent the worsening of global warming. Accordingly, I ride my bike more frequently to go to work, use electricity more wisely, and bring recyclable trashes to the recycling center more often. My house is also installed with solar energy instead of the energy that is based on oil. The trees and plants surrounding my house will be cultivated

better in order to contribute to the supply of oxygen in the air. I will also promote this kind of lifestyle to my neighbors and friends. This example, in the end, shows that the adjustment of human attitudes is a result of human volition and intentionality, not a product of the force of feeling.

The second reaction towards feeling is the affective reaction. This reaction denotes an action that is influenced by both feeling and human agency altogether. Schleiermacher describes two elements of religious life, which one of them is regarded as the affective response to a feeling. The first element is when man surrenders himself to the Universe and allows himself to be influenced by the side of it that is turned towards him. The second is when he transplants this contact which is one definite feeling, within, and takes it up into the inner unity of his life and being (Schleiermacher, 1893). The later element is called the affective reaction to feeling while the former is the feeling itself. In calling it affective, it is not meant that the reaction depends only on feeling but also depends on human subjectivity that has a particular interest, purpose, and volition. When both feeling and human subjectivity are combined and united, the result will be an action that springs from the unity of feeling and human volition. Schleiermacher writes, "From this inner unity, action springs of its own accord, as a natural branch of life. As we agreed, activity is a reaction of feeling, but the sum of activity should only be a reaction to the sum of feeling..." (Schleiermacher, 1893).

William James' description of how religious attitude should reflect such affective reaction as well. The contact with the divine for James should result in a powerful feeling that impels an individual to respond with solemnity, seriousness, and tenderness. If the result is feeling of pleasure, it must not be expressed in grin or snicker or if the result is feeling of sadness, it must not be responded by either scream or curse. He asserts, "The divine shall mean for us only in such primal reality as the individual feels impelled to respond to solemnly and gravely, and neither by a curse nor a jest." (James, 2002). Interestingly, such solemn respond to a feeling of the divine, according to James, is not for the sake of feeling itself. He goes on to insist that religiosity is measured through the use of such unity of feeling and solemn response, which is for coping with our uneasiness and wrongness (James, 2002).

In addition to the above intellectual and affective reactions, another human response towards feeling is called emanative reaction. In this respect, the power of feeling is dominating the influence of human volition. The superiority of feeling is overwhelming to the extent that human agency seems to have no role except the role of supporting the development of feeling. This category of reactions is very useful to explain the actions of mystics and those who endeavor to unite with the Source of feelings. The mystics, for example, may recite mantras, develop certain exercises, or perform spiritual practices in order to abandon their material and intellectual interests so that

they can immerse themselves into the world of feeling. Interestingly, those mantras, exercises, and practices are also products of feeling that is overwhelming inside a human subject.

CONCLUSION

John Dewey introduces an interesting idea of commonality of human beings, which in the context of religious experience lies upon the inclusivity of ideals and the universality of human attitudes to these ideals. However, from the above discussion, we can derive some interesting conclusions that differ from John Dewey's exposition regarding religious experience. First, religious experience essentially belongs to the order of being and not s belongs to the order of conception because the relation between the experiencing subject and the object experienced is existential, not representational or referential. The object is immediately present in the subject and is not represented or intermediated by any kind of intermediations. Second, the essential elements of religious experience are feeling because the existential experience occurs only in the realm of feeling in which the subject and the object of experience is united. Third, the feeling is derived from the process of emanation of the Source of feelings, not through the process intuiting (Schleiermacher) or imaginative connection with the ideals (Dewey and James). Fourth, human volition has a limited role in religious experience because the source of the agency is not human beings, but the Source of feelings (which may be called God, ideals,

divinities, the Whole, or the more). The role of the human is to react and to respond to the action or to the emanative power of feeling. Fifth, the feeling is universal and common to all human beings. It is only to be distinguished by its degrees of perfection and different human reactions attached to it.

Accordingly, this article finds some issues in Dewey's exposition on religious experience. First, religious experience in the account of John Dewey is essentially religious acquaintance because the subject of experience is not directly experiencing the object of experience (i.e. ideals). The subject is in fact acquainted with the representation of the ideals through intermediation, namely imagination. Second, religious experience in Dewey's account is derived from human intentionality and volition pertaining to external objects and is not rendered by an immediate presence of the object in the individual subject. Therefore, instead of considering feeling as the nature of religious experience, Dewey regards human attitudes towards the ideals as the main factor of religious experience, which is proven to be incorrect. Third, the universality and commonality of religious experience is evidently not located in the inclusivity of ideals or in human responses in the forms of human adjustment in life. The universality of religious experience resides in the realm of feeling. Fourth, in the realm of human responses towards a feeling or towards ideals, there is a plurality of religious experiences. The feeling is sometimes followed by intellectual reactions, sometimes accompanied by affective

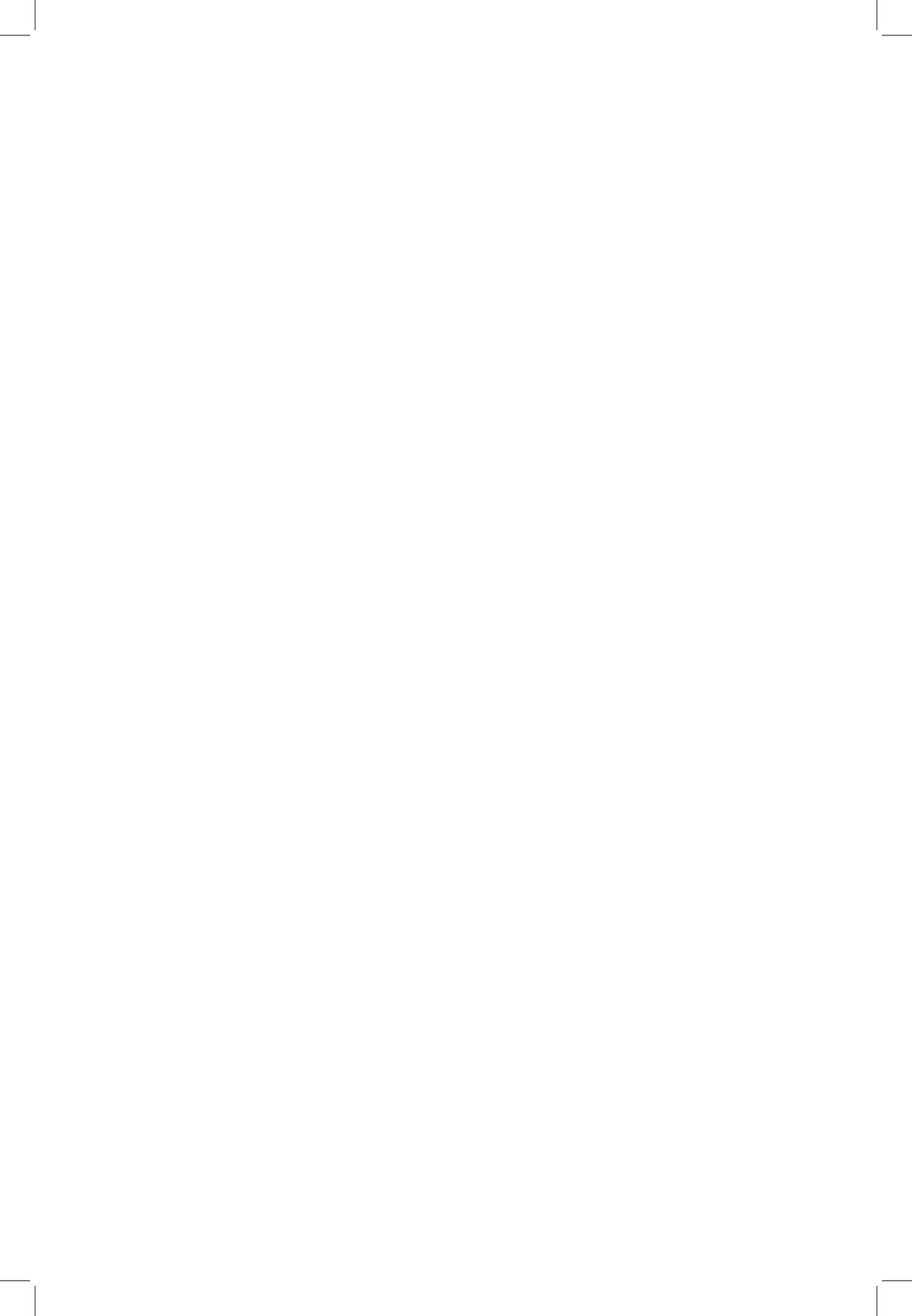
reactions, and sometimes strengthened by emanative reactions. John Dewey seems to be unaware of such different forms of religious experience.

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Effect of Compression Socks and Smooth Socks on VO_{2max} and Blood Lactate Concentration of Experienced and Novice Runners

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ABSTRACT

Novice and experienced runners consistently seek appropriate strategies that can maximise their performance which include wearing compression socks. The purpose of the present study was to observe the effects of compression socks (CS) and smooth socks (SS) on blood lactate (BLa) and maximal oxygen uptake (VO_{2max}) in runners with different experience level. The result of this study may benefit the fitness industries and would promote new running strategy. A randomized cross-over design was used in this study. Accordingly, eight experienced and eight novice runners (23.56 ± 1.41 years) were selected for the study. In particular, the participants were required to run on a Bruce treadmill for both conditions with random arrangement separated by seven days of the washout period. A mixed model ANOVA showed a significant difference ($p < 0.05$) for VO_{2max} in novice runners instead of experienced runners. Moreover, it was revealed that the VO_{2max} ($44.5 \text{ ml/min/kg} \pm 1.1 \text{ ml/min/kg}$) in novice runners was higher while wearing CS. However, no significant differences were found for BLa between the conditions (CS/SS) for both groups (Novice/Experienced). Therefore, the overall finding suggests that the use of

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CS during running only increases the VO_{2max} among novice runners.

Keywords: Compression socks, experienced runners, novice runners, running performance

INTRODUCTION

Novice and experienced runners consistently seek a new method that can increase their running performance to the fullest potential. For example, the latest trend to hit the performance gear shelve is to wear compression garments (Rider et al., 2014). Moreover, it should be noted that compression garments come with different styles such as sleeves and socks (knee length, thigh length), upper body garments (covering the torso and upper limbs in full or part), lower-body garments (from waist to covering legs in full or part) that are worn with the aim of improving their running performance. In the case of the present study, it must be noted that compression socks (CS) were first introduced as a rehabilitation aid or treatment for patients with a venous disorder such as thrombosis, oedema, and phlebitis.

The CS operates by giving pressure to the surface veins, arteries, and muscles with the aim of forcing the blood to circulate through a narrower channel in order to improve blood flow. In return, this causes arterial pressure to increase and more blood to return to the heart from the limbs. According to Areces et al. (2015), this will enhance venous return blood flow and reduce leg swelling. On a similar note, the compression garments are able to increase

internal compression, which consequently enhances the extrastitial fluid return to the vascular system (Fletcher et al., 2014). More importantly, it is believed that the benefits of CS in the medical setting may produce the same ergogenic benefit in the sports setting. Accordingly, CS was later introduced as a mechanical ergogenic aid for sports, especially for endurance sport with several benefits which include improvement in muscular strength, muscular power, muscular endurance, proprioception, recovery, and injury management.

Regarding this matter, a previous study conducted by Ali et al. (2007) concluded the need to conduct future works that investigate the use of compression socks for other user groups, including untrained participants, females, and older athletes. Apart from that, research done by Struhár et al. (2018) discovered that running experience might be able to minimise the effect of CS. Hence, the objective of the present study was to investigate the effect of compression socks and smooth socks on VO_{2max} and blood lactate concentration of experienced and novice runners. Moreover, this suggestion was supported by Rider et al. (2014) who stated that the level of training had an influence on the possible effects of wearing CS.

METHODS

The Socks

Commercial over-the calf length type CS and SS were obtained from a local sport shop. Some properties of both socks were characterized in the preliminary stage. CS

outperforms SS in terms of total breaking strength with the value of 495.7 N and 399.1 N respectively. Nevertheless, in terms of abrasion resistance, CS were found lower than SS with the weight losses of 0.7 and 0.6 g respectively, after being abraded 10,000 cycles. In water vapour and air permeability tests, the results showed that CS ($29 \text{ g m}^{-2} \text{ day}^{-1}$ and 39 mm s^{-1}) has lower value than SS ($57 \text{ g m}^{-2} \text{ day}^{-1}$ and 77 mm s^{-1}) due to the tighter structure of CS.

Participant Selection

A total of 16 participants that participated in the present study were in the age range of 20-25 ($M=23.56$, $SD=1.41$ years old). The number of participants was based on the sample size used in the previous study (Rider et al., 2014; Rivas et al., 2017; Struhár et al., 2018). In the case of the current research, the inclusion criteria for experienced runner are as follows: (1) a running history of at least four years, (2) a running volume between 25 and 70km per week during the previous year, and (3) a duration of more than 34 minutes for 10,000m. On the other hand, the followings are the inclusion criteria for novice runner: (1) an absolute beginner with a running volume of less than 5km per week, or (2) no prior running experience. More importantly, all of the participants were required to be free from any injuries within the past six months prior to the testing and healthy with no cardiovascular-related diseases. Other than that, it was also made compulsory for the participants to be free from any alcohol or drug consumption 24 hours before the test and procedure.

Familiarisation Session

Every participant was required to attend a familiarization session. During the familiarization session, the participant signed the consent form and was familiarized with all the procedures. The height and body mass were also recorded. The diameter of the calf at the widest point and the size of the shoe was taken to determine the correct size of socks for precise compression socks fitting based on the socks manufactures guideline.

Procedure

In the case of the present study, all participants were required to answer the Physical Activity Readiness Questionnaire (PAR-Q) (American College of Sports Medicine [ACSM], 2014) and pass the resting electrocardiogram (ECG) with no abnormality. In addition, written informed consent was signed by each of the participants prior to the conduct of the test. The study was approved and conducted based on the guidelines set by the board of ethics committee Universiti Teknologi MARA (600-IRMI(5/1/6)REC/228/18). Next, the participants were categorised randomly into two groups using the block list method in order to avoid any possible sequence effect. Furthermore, all participants were required to attend the sports laboratory on two occasions (2 sessions) separated by a gap of seven days in order to omit any carryover effects of fatigue as well as training effects. Accordingly, the participants were asked to refrain from vigorous exercise training sessions 48 hours before the test.

This study was a non-blind ability because the participant will be able to feel when compression socks are being worn and also the difference in effort to put on compression socks and smooth socks. Specifically, this study utilised the crossover design as follows: (1) Group 1 wear the CS for their first session and SS for their second session, and (2) Group 2 wear SS for first session and CS for second session. Other than that, all the participants were asked to eat a similar or identical meal 24 hours before each session as well as required to wear the same clothing and running shoes for each session.

Testing Session

In the present study, a total of 10 stages were conducted for the Bruce treadmill test in which the first stage started with the walking rate of 2.74 km/h and a gradient set at 10%. Next, it should be noted that the gradient and speed were respectively increased at every level based on Bruce Protocol (Luong et al., 2016). Moreover, the participants were informed to grab onto the treadmill handrails if they need to stop for any reason during the test. Hence, this would serve as a volitional sign to end the test. In this case, the speed of the treadmill was reduced to 2.74 km/h if the participant achieved volitional fatigue or stop the exercise, while the gradient was lowered to 0% which indicates the end of the test. Next, the participants were required to walk for another five minutes for the cooling down process.

Maximal Oxygen Uptake (VO_{2max})

Each participant was fitted with a Polar heart

rate monitor (Polar USA, Lake Success, NY, USA), while an indirect method was adopted in the present study to predict the maximal oxygen uptake (validity $r=0.96$). In addition, the reliability of the test was tested based on Hall-López et al. (2015) with high reproducibility between the two conservative trials ($r=0.907$).

Blood Lactate (BLa)

The BLa was measured by a qualified lab assistant using accutrend plus meter (Roche, Rotkreuz, Switzerland) with a standard finger-prick method. The blood lactate was taken four times, namely the pre-test, post-test, post 5 minutes, and posts 15 minutes throughout the test. Moreover, the device was considered as a valid ($r=0.91$) and reliable ($r=0.999$) method to measure blood lactate for the sports research field (Baldari et al., 2009).

RESULTS

The present study conducted a mixed between-within subject analysis of variance with the aim of investigating the blood lactate concentration of the two different groups (novice and experienced) over a four-time period (pre, post, post-5 minutes, and post-15 minutes). However, no significant difference was found for socks condition and blood lactate concentration for both groups of novice runners ($F(1)= 0.384$, $p=0.545$, $\eta_p^2 = 0.027$) and experienced runners, ($F(1)= 0.136$, $p=0.718$, $\eta_p^2=0.010$). Nevertheless, it should be noted that the blood lactate concentration during the recovery period for novice runners was

higher for compression socks (9.9 mmol/L ± 0.758 mmol/L, CV=7.66%) compared to smooth socks (9.4 mmol/L ± 0.64 mmol/L, CV=6.81%). On the other hand, the blood lactate concentration during the recovery period for experienced runners was lower for compression socks (11.11 mmol/L ± 0.64 mmol/L, CV=5.76%) compared to smooth socks (10.8 mmol/L ± 0.76 mmol/L, CV=7.03%) (Figure 1).

On another note, an independent t-test was conducted to investigate the difference of maximal oxygen uptake between different conditions (CS/SS) of

both groups (Novice/Experience). The results showed a significant difference for socks condition and maximal oxygen uptake for novice runners ($F(1)= 11.016, p=0.005, \eta_p^2 = 0.440$). Specifically, it was observed that the maximal oxygen uptake was higher when wearing a compression socks (44.5 ml/min/kg ± 1.1 ml/min/kg, CV=2.47%) compared to smooth socks (43.0 ml/min/kg ± 1.24 ml/min/kg, CV=2.88%). However, no significant difference was detected for the socks condition and maximal oxygen uptake among experienced runners ($F(1)= 3.75, p=0.073, \eta_p^2 = 0.211$). Nevertheless, it

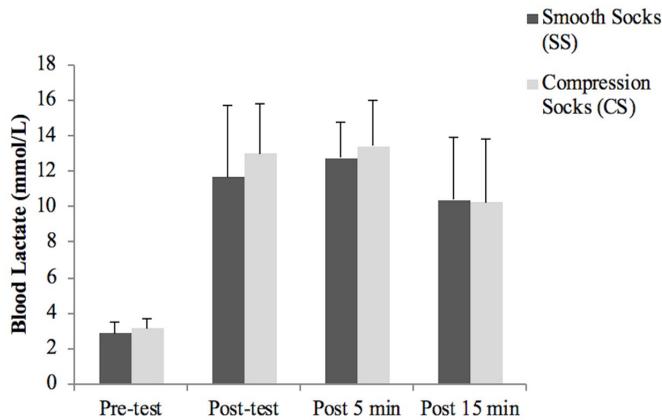


Figure 1. Mean (SD) blood lactate concentration (Novice)

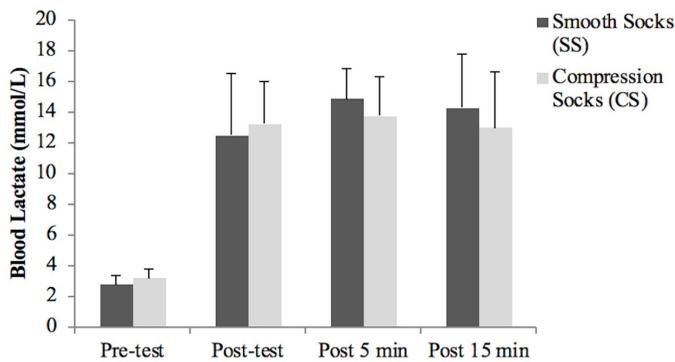


Figure 2. Mean (SD) blood lactate concentration (Experienced)

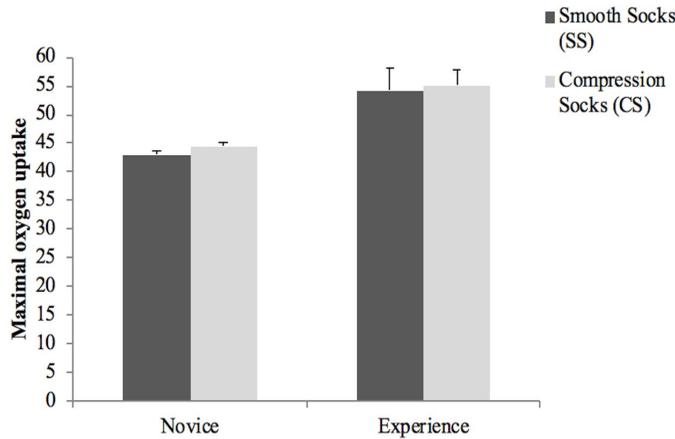


Figure 3. Mean (SD) maximal oxygen uptake by group

is important to note that the maximal oxygen uptake for compression socks (55.1 ml/min/kg \pm 1.09 ml/min/kg, CV=1.98%) was higher than smooth socks (54.3 ml/min/kg \pm 1.24 ml/min/kg, CV=2.28%) (Figure 2 & Figure 3).

DISCUSSION

Effect of CS on Blood Lactate Concentration

The ability to maintain adequate circulation plays an important part in the recovery phase which can be achieved by enhancing the elimination of built-up lactic acid. In addition, engineered compression can be applied to exert a controlled external pressure over specific body parts. Furthermore, the recoil force by the elastic fabric with limited stretch during sports is able to trigger an acceleration of venous blood flow which enhances the blood flow and venous return, thus consequently increasing oxygen delivery to working muscles and eliminating lactic acid and waste more rapidly (Liu & Little, 2009). However, no

significant difference was found between both conditions and groups.

The finding of this study is in agreement with a past study conducted by de Glanville and Hamlin (2012) who reported that compression tights were not able to improve blood lactate clearance after aerobic endurance activities (40 km cycling trial). Furthermore, the result of the present study was found to be consistent with the finding by Areces et al. (2015) which reported that compression socks did not prevent exercise-induced muscle damage. Meanwhile, a study was done by Lovell et al. (2011) supported the finding of the current research by revealing that no changes would occur on blood lactate immediately after treadmill running (\sim 85% VO_{2max}) when wearing compression garments. Other than that, similar research on the effect of CS when running 40 min on a treadmill performed by Hsu et al. (2017) found no significant changes in blood lactate.

Furthermore, the results of the present study by the group showed that novice

runners had a higher value of blood lactate concentration when wearing compression socks compared to smooth socks. However, this finding was unexpected and one of the possible explanations that led to this result is that the participants were required to run until they were exhausted.

In other words, novice runners ran on the treadmill for a longer period of time while wearing compression socks, thus causing higher blood lactate due to the longer period spent on running. Most importantly, this finding was supported by Rider et al. (2014) who stated that lower blood lactate levels observed in the CS group condition were resulted from the decrease in time to fatigue (TTF). Hence, it should be understood that more time spent running would increase the blood lactate level. Apart from that, the placebo effect of wearing CS may have taken place because the novice runners ended up running for a longer period of time when wearing compression socks, thus producing a higher blood lactate concentration. In addition, the participants were fully aware of what socks they were wearing due to the compression level. However, the placebo effect still occurred even though a smooth sock was provided to minimise the compression level. Moreover, the use of placebo may have helped in eliminating any bias (consciously or subconsciously).

On the other hand, the findings of the present study showed that experienced runners had a higher value of blood lactate concentration when wearing smooth socks compared to compression socks which is in

addition, a trend of improvement managed to be detected even though the result was non-statistically significant. Nevertheless, several possible explanations may be able to describe the insignificant result. Blood lactate production in the muscle and lactate accumulation in the blood depends on the individual lactate threshold which was not measured in this study.

Besides that, a study on patients with chronic venous insufficiency conducted by Padberg et al. (2004) concluded that six-month structured exercise was able to enhance muscle pump function. Hence, the finding of this study is in agreement with the previous study because it stands to reason that training will result in improved muscle pump function in healthy participants. Therefore, it can be clearly understood that aerobically trained improvement in muscle pump function will leave little room for improvement when wearing CS. Accordingly, this may be the reason that led to no significant changes in their blood lactate due to their well-developed muscle pump function. Finally, the result also suggests that metabolic activity may not be affected by the conditions, while the changes in performance may not be pure as a result of the physiological changes.

Effect of CS on Maximal Oxygen Uptake

Past research that investigated different pressure profile and lower-limbs haemodynamic found that the application of compression garments with light and mild compression profiles was effective

in reducing venous dilation and venous pooling, which also improved venous return in the lower extremities (Liu et al., 2008). Hence, this may also be the mechanism behind the improvement of maximal oxygen uptake in the present study. The finding of this research is consistent with the study conducted by Sperlich et al. (2010) which discovered no significant difference in maximal oxygen uptake in a well-trained athlete when wearing CS. Similarly, research done by Goh et al. (2011) on well-trained middle distance runners and triathlete found no significant difference when wearing various size lower-body compression garments. Meanwhile, research conducted on well-trained endurance athlete by Wahl et al. (2012) revealed no significant difference in maximal oxygen uptake when wearing CS. In addition, this finding is similar to the study of Ali et al. (2011) which found no significant difference in maximal oxygen uptake when wearing CS during a 40 min treadmill run on highly trained runners and triathlete.

Nevertheless, a significant difference in maximal oxygen uptake was found in novice runners when wearing CS. This preliminary finding suggests that the effectiveness of CS may be influenced by the experience level because CS only affected novice runners. A possible explanation for this may refer to the method used in predicting VO_{2max} which was based on time to exhaustion. Hence, it can be concluded that the placebo effect may have taken place on novice runners when running despite the randomised sequence of condition that was aimed to reduce the

sequence effect. Meanwhile, it is crucial to note that novice runners may be affected by psychological factors of wearing CS which caused the increase in the running time when wearing CS.

Apart from that, several physiological factors may have influenced the increased value of VO_{2max} . Specifically, the mechanism behind the improvement of VO_{2max} in novice runners when wearing compression socks may be caused by the increase of blood flow and stroke volume which led to higher cardiac output. Higher cardiac output is linearly related to VO_{2max} . This finding is supported by a study conducted by Mann et al. (2016) on the effects of compression socks on arterial blood flow and arterial reserves in amateur sportsmen.

Meanwhile, a study by Dascombe et al. (2011) suggested that the use of CS facilitated a small number of cardiorespiratory and peripheral physiological benefits which were mostly related to the improvement of venous flow. The present study employed an indirect method to predict the maximal oxygen uptake using a formula from the total running time. Nevertheless, a direct method (collecting expired air) may produce more precise data despite the fact that several past research agreed that the indirect method is a reliable technique that can predict maximal oxygen uptake.

On another note, no significant difference was discovered in the maximal oxygen uptake for experienced runners. However, the result of VO_{2max} for experienced runners showed a non-statistically trend of improvement. In the present study, the total

running time was utilised as a prediction formula for the maximal oxygen uptake. In this case, experienced runners may not be affected by the placebo effect because they ran until maximum exhaustion for both conditions. Hence, this explains why there was no significant difference in the maximal oxygen uptake due to the same total running time for both conditions. Apart from that, the number of participants in the present study was limited, thus restricting the statistical power. Hence, it should be understood that a larger sample size would produce greater statistical power. In addition, the findings from the current study also suggested that experience runners should employ the use of compression socks in order to gain a faster improvement in their running performance. Nevertheless, the trend of improvement indicates that the maximal oxygen uptake may be affected by CS even though the improvement was not statistically significant. A past study concluded that it is not harmful to wear CS and every runner would do anything to gain some slight advantage over their opponents. The findings of the current study suggest that runners should employ the use of compression socks in order to gain a faster running performance, especially in the cardiorespiratory component.

CONCLUSION

The present study examined the effect of CS on runners while running. In addition, the effect of wearing compression socks while running on the running parameters in novice and experienced runners were

tested, particularly in terms of blood lactate concentration and maximal oxygen uptake. The statistical analysis of the current research concluded no significant changes in wearing compression socks on blood lactate concentration both on novice and experienced runners. However, a significant difference in maximal oxygen uptake was discovered in novice runners when wearing compression socks.

Furthermore, the present study was the first of its kind known by the author which made the author select two different levels of runners, namely novice and experienced runners because previous findings indicated that compression socks improved performance outcomes. In addition, it is possible for the outcomes to vary if the number of participants is larger, while the criteria of the novice runners should be more elaborated (not active in other sports). Regardless, the results of the present study emphasised on the increase of the maximal oxygen uptake among novice runners but it was counterproductive for the experienced runners when wearing compression socks during running. Overall, this suggests that there is a possibility of some positive changes in the cardiorespiratory components of novice runners.

RECOMMENDATIONS

The current research was limited in several ways due to the numerous types of compression garments available in the market which include hand sleeve, shorts, calf sleeve and upper body garments. Hence, it is impossible to generalise the effect of

the compression garments considering the fact that a specific type of compression garment may produce a different result. Apart from that, it is important to note that these compression garments are made using different materials and various technical designs depending on the manufacturer itself. Therefore, future research should be carried out to investigate different types of garments and it is also important to consider the different types of material.

Furthermore, a further study can usefully explore different types of compression level because it may produce a different result. In addition, it would be interesting to understand the effect of a certain pressure on the running performance itself. Other than that, future study should also take consideration of the age and gender of the participant because there is a scarce number of studies that investigate the effect of CS on youth and women.

Future research will have to be conducted in order to determine different running protocol considering the existence of numerous running protocols which can either be outdoor or lab-based protocol. The present study employed the Bruce maximal treadmill run which was a lab-based protocol as the running protocol. However, this running environment may not simulate a real race environment which might pose different effects on the participants' performance. Hence, future work should also take into consideration the running time and recovery time. A new study on the effect of CS on a longer period of running time should be

proposed with an emphasis on the recovery time period.

Another possible area of future research would be to investigate the factors contributing to the improved performance by adopting more extensive physiological parameters such as venous return and inflammatory markers that were not investigated in the present study. Apart from that, further investigation should also be carried out on novice runners with more elaborated criteria (does not play other sport) in order to gain a greater understanding on the effect of compression on muscle pump function.

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DLSU	– De La Salle University	UNIMAS	– Universiti Malaysia Sarawak
IIUM	– International Islamic University Malaysia	UNISEL	– Universiti Selangor
IKIM	– Institut Kefahaman Islam Malaysia	UNISZA	– Universiti Sultan Zainal Abidin
ILRI	– International Livestock Research Institute	UNITEN	– Universiti Tenaga Nasional
INCEIF	– International Centre for Education in Islamic Finance	UNPAD	– Universitas Padjadjaran
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INSTRUCTIONS TO AUTHORS

(REGULAR ISSUE)

-- Manuscript Preparation & Submission Guide --

Revised: March 2020

Please read the Pertanika guidelines and follow these instructions carefully. The Chief Executive Editor reserves the right to return manuscripts that are not prepared in accordance with these guidelines.

MANUSCRIPT PREPARATION

Manuscript Types

Pertanika accepts submission of mainly **four** types of manuscripts

- that have not been published elsewhere (including proceedings)
- that are not currently being submitted to other journals

1. REGULAR ARTICLE

Regular article is a full-length original empirical investigations, consisting of introduction, methods, results and discussion. Original research work should present new and significant findings that contribute to the advancement of the research area. Analysis and Discussion must be supported with relevant references.

Size: Generally, it is expected **not to exceed 6000 words** (excluding the abstract, references, tables and/or figures), a maximum of **80 references**, and **an abstract of less than 250 words**.

2. REVIEW ARTICLE

A review article reports critical evaluation of materials about current research that has already been published by organizing, integrating, and evaluating previously published materials. It summarizes the status of knowledge and outline future directions of research within the journal scope. A review article should aim to provide systemic overviews, evaluations and interpretations of research in a given field. Re-analyses as meta-analysis and systemic reviews are encouraged.

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3. SHORT COMMUNICATIONS

Each article should be timely and brief. It is suitable for the publication of significant technical advances and may be used to:

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4. OTHERS

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Pertanika **emphasizes** on the linguistic accuracy of every manuscript published. Articles must be in **English** and they must be competently written and presented in clear and concise grammatical English. Contributors are strongly advised to have the manuscript checked by a colleague with ample experience in writing English manuscripts or a competent English language editor.

Author(s) **may be required to provide a certificate** confirming that their manuscripts have been adequately edited. **All editing costs must be borne by the author(s).**

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Tables / figures list: A **list** of number of **black and white / colour figures and tables** should also be indicated on this page. See "**5. Figures & Photographs**" for details.

Example (page 2):

***In vivo* Fecundity Evaluation of *Phaleria macrocarpa* Extract Supplementation in Male Adult Rats**

***Sui Sien Leong*^{1*} and *Mohamad Aziz Dollah*²**

¹*Department of Animal Sciences and Fishery, Universiti Putra Malaysia, 97008 Bintulu, Sarawak, Malaysia*

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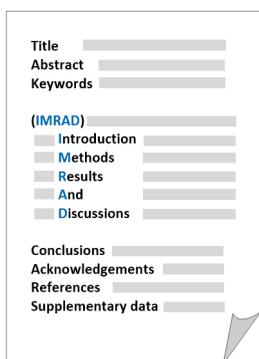
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- **Page 4: Text**

A regular paper should be prepared with the headings *Introduction, Methods, Results and Discussions* in this order. The literature review maybe part of or separated from Introduction. A conclusion maybe embedded or separated from Results and Discussions.



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Most scientific papers are prepared according to a format called IMRAD. The term represents the first letters of the words Introduction, Materials and Methods, Results, And, Discussion. It indicates a pattern or format rather than a complete list of headings or components of research papers; the missing parts of a paper are: Title, Authors, Keywords, Abstract, Conclusions, and References. Additionally, some papers include Acknowledgments and Appendices.

The Introduction explains the scope and objective of the study in the light of current knowledge on the subject; the Materials and Methods describes how the study was conducted; the Results section reports what was found in the study; and the Discussion section explains meaning and significance of the results and provides suggestions for future directions of research. The manuscript must be prepared according to the Journal's instructions to authors.

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Level of heading	Format
1 st	LEFT, BOLD, UPPERCASE
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PVY infected Nicotiana tabacum plants optical density in ELISA

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Any individuals and entities who have contributed should be acknowledged appropriately.

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Examples of reference style are given below:

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Book with 1-2 authors	<p>Information prominent' (the author's name is within parentheses):</p> <p>... (Cochrane, 2007) ...</p> <p>Or</p> <p>'Author prominent' (the author's name is outside the parentheses):</p> <p>Cochrane (2007) ...</p>	Cochrane, A. (2007). <i>Understanding urban policy: A critical approach</i> . Malden, United States: Blackwell Publishing.
Book with 3 or more authors (Pertanika's format)	<p><i>For all in-text references, list only the first author's family name and followed by 'et al.'</i></p> <p>Information prominent' (the author's name is within parentheses):</p> <p>... (Seeley et al., 2011) ...</p> <p>Or</p> <p>'Author prominent' (the author's name is outside the parentheses):</p> <p>Seeley et al. (2011) ...</p>	Seeley, R., VanPutte, C., Regan, J., & Russo, A. (2011). <i>Seeley's anatomy & physiology</i> . New York, United States: McGraw-Hill.

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Journal article with 3 or more authors (Pertanika's format)	<p><i>For all in-text references, list only the first author's family name and followed by 'et al.'</i></p> <p>Information prominent' (the author's name is within parentheses):</p> <p>... (Erlo et al., 2008) ...</p> <p>Or</p> <p>'Author prominent' (the author's name is outside the parentheses):</p> <p>Erlo et al. (2008) ...</p>	<p>Elo, A., Ervasti, J., Kuosma, E., & Mattila, P. (2008). Evaluation of an organizational stress management program in a municipal public works organization. <i>Journal of Occupational Health Psychology</i>, 13(1), 10-23. doi: 10.1037/1076-8998.13.1.10</p>

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Journal article with more than 8 or more authors	<p>Information prominent' (the author's name is within parentheses):</p> <p>... (Steel et al., 2010)..</p> <p>Or</p> <p>'Author prominent' (the author's name is outside the parentheses):</p> <p>Steel et al. (2010) ...</p>	Steel, J., Youssef, M., Pfeifer, R., Ramirez, J. M., Probst, C., Sellei, R., ... Pape, H. C. (2010). Health-related quality of life in patients with multiple injuries and traumatic brain injury 10+ years postinjury. <i>Journal of Trauma: Injury, Infection, and Critical Care</i> , 69(3), 523-531. doi: 10.1097/TA.0b013e3181e90c24
Journal article with DOI	<p>Information prominent' (the author's name is within parentheses):</p> <p>... (Shaw et al., 2005)..</p> <p>Or</p> <p>'Author prominent' (the author's name is outside the parentheses):</p> <p>Shaw et al. (2005) ...</p>	Shaw, K., O'Rourke, P., Del Mar, C., & Kenardy, J. (2005). Psychological interventions for overweight or obesity. <i>The Cochrane database of systematic reviews</i> (2). doi:10.1002/14651858.CD003818.pub2

Newspapers

Newspapers	Insertion in Text	In Reference List
Newspaper article – with an author	... (Waterford, 2007)...	Waterford, J. (2007, May 30). Bill of rights gets it wrong. <i>The Canberra Times</i> , p. 11.
Newspaper article – without an author	... ("Internet pioneer", 2007) ...	Internet pioneer to oversee network redesign. (2007, May 28). <i>The Canberra Times</i> , p. 15.
Article in an newsletter	... ("Australians and the Western Front", 2009) ...	Australians and the Western Front. (2009, November). <i>Ozculture newsletter</i> . Retrieved June 1, 2019, from http://www.cultureandrecreation.gov.au/newsletter/

Conference / Seminar Papers

Conference / Seminar Papers	Insertion in Text	In Reference List
<p>Print – If the paper is from a book, use the book chapter citation format. If it is from regularly published proceedings (e.g. annual), use the Journal article citation format.</p>	<p>... (Edge, 1996) ...</p> <p>Or</p> <p>Edge (1996) ...</p>	<p>Edge, M. (1996). Lifetime prediction: Fact or fancy? In M. S. Koch, T. Padfield, J. S. Johnsen, & U. B. Kejser (Eds.), <i>Proceedings of the Conference on Research Techniques in Photographic Conservation</i> (pp. 97-100). Copenhagen, Denmark: Royal Danish Academy of Fine Arts.</p>
<p>Online</p>	<p>... (Tester, 2008) ...</p> <p>Or</p> <p>Tester (2008) ...</p>	<p>Tester, J. W. (2008). The future of geothermal energy as a major global energy supplier. In H. Gurgenci & A. R. Budd (Eds.), <i>Proceedings of the Sir Mark Oliphant International Frontiers of Science and Technology Australian Geothermal Energy Conference</i>, Canberra, Australia: Geoscience Australia. Retrieved June 1, 2019, from http://www.ga.gov.au/image_cache/GA11825.pdf</p>

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